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STIC Database Tracking Number: 160823

TO: Marcela Cordero Garcia

Location: 3c35/3c18

Art Unit: 1654

Wednesday, August 03, 2005

Case Serial Number: 10/722843

From: Noble Jarrell

Location: Biotech-Chem Library

Rem 1B71

Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: MARCELA M CORDERO GARCIA Examiner #: 80381 Date: 2/27/05
Art Unit: 1654 Phone Number: 2-2934 Serial Number: 101722, 843
Location (Bldg/Room#): REM3C35 (Mailbox #): 3618 Results Format Preferred (circle): PAPER . DISK

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: PEPTIDES WHICH TARGET

Inventors (please provide full names): SEE BQS

Earliest Priority Date: 11/25/02

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

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Searcher: Noble

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Date Searcher Picked Up: _____

Date Completed: 8/3/05

Searcher Prep & Review Time: 10

Online Time: 26

Type of Search

____ NA Sequence (#)

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1 Structure (#)

✓ Bibliographic

____ Litigation

____ Fulltext

____ Other

Vendors and cost where applicable

✓ STN _____ Dialog

____ Questel/Orbit _____ Lexis/Nexis

____ Westlaw _____ WWW/Internet

____ In-house sequence systems

____ Commercial _____ Oligomer _____ Score/Length
____ Interference _____ SPDI _____ Encode/Transl
____ Other (specify)

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(FILE 'HOME' ENTERED AT 08:23:24 ON 03 AUG 2005)

FILE 'HCAPLUS' ENTERED AT 08:23:29 ON 03 AUG 2005

L1 3 US2005020810/PN OR (US2002-429174# OR US2003-475539#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 08:24:34 ON 03 AUG 2005

FILE 'HCAPLUS' ENTERED AT 08:24:34 ON 03 AUG 2005

L2 TRA L1 1- RN : 209 TERMS

FILE 'REGISTRY' ENTERED AT 08:24:34 ON 03 AUG 2005

L3 209 SEA L2

FILE 'WPIX' ENTERED AT 08:24:39 ON 03 AUG 2005

L4 3 L1

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FILE COVERS 1907 - 3 Aug 2005 VOL 143 ISS 6

FILE LAST UPDATED: 2 Aug 2005 (20050802/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:610128 HCAPLUS

DN 141:157478

ED Entered STN: 30 Jul 2004

TI Peptides which target tumor and endothelial cells, compositions and uses thereof

IN Allan, Amy L.; Yoon, Won Hyung; Gladstone, Patricia L.; Ternansky, Robert J.; Parry, Graham; Donate, Fernando; Mazar, Andrew

PA Attenuon, Llc, USA

SO PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 63

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004063213	A2	20040729	WO 2003-US37895	20031125 <--
	WO 2004063213	A3	20050303		

Search done by Noble Jarrell

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004162239 A1 20040819 US 2003-723144 20031125 <--
 US 2005020810 A1 20050127 US 2003-722843 20031125 <--
 PRAI US 2002-429174P P 20021125 <--
 US 2003-475539P P 20030602 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004063213	ICM	C07K
US 2004162239	NCL	514/012.000; 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/017.000; 514/018.000; 530/324.000; 530/325.000; 530/326.000 <--
US 2005020810	NCL	530/324.000; 530/325.000; 530/326.000; 530/327.000; 530/328.000; 530/329.000 <--

OS MARPAT 141:157478

AB The invention relates generally to peptide analogs of Ac-PHSCN-NH₂ which target tumor and endothelial cells and have antitumor, antiangiogenic and antimetastatic activity and to methods for their synthesis and use in pharmaceutical compns. for treating, preventing and detecting diseases characterized by tumor growth, metastasis and angiogenesis. The peptide analogs may serve, inter alia, as carriers of radioactivity, PET-active compds., toxins, fluorescent mols. and PEG mols. Peptides R1[(NHCHR₂CO)0-1(X1)0-100]m-X₂-X₃-X₄-X₅-X₆-[(X₇)0-1(NHCHR₃CO)0-1]nNR₄R₅ [R₁ is (un)substituted acyl, alkyl, cycloalkyl or imino, or acyl chelate; R₂ is substituted alkyl; R₄, R₅ are (un)substituted alkyl; X₁, X₇ are NH(CH:CH)1-6CO, NH(CH₂)1-6CO, NHCHMeCO; X₂-X₆ are α-amino acids which are defined; m, n are 0 or 1, with the proviso that R₁ is not acetyl when R₄ and R₅ are H and m and n are 0] are claimed. Thus, Ac-Pro-His-Ser-Cys(Ac)-Asn-OH was prepared by the solid-phase method and coupled to doxorubicin hydrochloride to afford the conjugate.

ST peptide prolylhistidylserylcysteiny laspartamide analog prepn antitumor

IT Angiogenesis
 Angiogenesis inhibitors
 Antitumor agents
 Neoplasm

(preparation of peptides which target tumor and endothelial cells)

IT Peptides, preparation
 RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

IT Polyoxyalkylenes, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

IT 729594-60-9P
 RL: DGN (Diagnostic use); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of peptides which target tumor and endothelial cells)

IT 7440-74-6DP, Indium, complexes with DPTA peptide conjugate

262438-43-7DP, analogs	729594-61-0P	729594-62-1P	729594-63-2P
729594-64-3P	729594-65-4P	729594-66-5P	729594-67-6P
729594-68-7P	729594-69-8P	729594-70-1P	729594-71-2P
729594-72-3P	729594-73-4P	729594-74-5P	729594-75-6P
729594-76-7P	729594-77-8P	729594-78-9P	729594-79-0P
729594-80-3P	729594-81-4P	729594-82-5P	729594-83-6P
729594-84-7P	729594-85-8P	729594-86-9P	729594-87-0P
729594-88-1P	729594-89-2P	729594-90-5P	729594-91-6P
729594-92-7P	729594-93-8P		

729594-94-9P 729594-95-0P 729594-96-1P 729594-97-2P 729594-98-3P
 729594-99-4P 729595-00-0P 729595-01-1P 729595-02-2P 729595-03-3DP,
 polyethylene glycol derivative 729595-04-4P 729595-05-5P 729595-06-6P
 729595-07-7P 729595-08-8P 729595-09-9P 729595-14-6P 730960-54-0P
 731003-01-3DP, Indium complexes 731003-01-3P 731003-02-4P
 RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

IT 456-22-4, 4 Fluorobenzoic acid 501-97-3 553-12-8 3301-79-9, 6
 Carboxyfluorescein 13811-11-5 25316-40-9, Doxorubicin hydrochloride
 34071-95-9 66134-67-6 76823-03-5, 5 Carboxyfluorescein 106966-68-1
 137076-54-1, 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid,
 tris 1 1 dimethylethyl ester 517913-89-2 622405-78-1 729595-15-7
 729595-16-8D, resin-bound 729595-17-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

IT 729595-10-2DP, resin-bound 729595-11-3DP, resin-bound 729595-12-4DP,
 resin-bound 729595-13-5DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

L1 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:467702 HCAPLUS

DN 141:33798

ED Entered STN: 10 Jun 2004

TI Peptides which inhibit angiogenesis, cell migration, cell invasion and
 cell proliferation, their preparation, and compositions and therapeutic
 uses thereof

IN Allan, Amy L.; Donate, Fernando; Hopkins, Stephanie A.; Gladstone,
 Patricia L.; Mazar, Andrew; O'Hare, Sean M.; Parry, Graham; Plunkett,
 Marian L.; Ternansky, Robert J.; Yoon, Won Hyung

PA Attenuon, LLC, USA

SO PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K

CC 1-8 (Pharmacology)

Section cross-reference(s): 34, 63

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047771	A2	20040610	WO 2003-US38175	20031125 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004162239	A1	20040819	US 2003-723144	20031125 <--
US 2005020810	A1	20050127	US 2003-722843	20031125 <--
PRAI US 2002-429174P	P	20021125	<--	
US 2003-475539P	P	20030602	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004047771	ICM	A61K
US 2004162239	NCL	514/012.000; 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/017.000; 514/018.000; 530/324.000; 530/325.000; 530/326.000 <--

US 2005020810 NCL 530/324.000; 530/325.000; 530/326.000; 530/327.000;
530/328.000; 530/329.000 <--

OS MARPAT 141:33798

AB The invention discloses peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, as well as methods of making the peptides, pharmaceutical compns. containing the peptides, and methods of using the peptides and pharmaceutical compns. to treat diseases associated with aberrant vascularization, e.g. cancer.

ST peptide cell invasion migration proliferation inhibition; antitumor aberrant vascularization disease peptide prepn

IT Sarcoma
(cartilage chondrosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Cartilage, neoplasm
(chondrosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Intestine, neoplasm
(colon; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Blood vessel
(endothelium; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Blood vessel, neoplasm
Sarcoma
(hemangiosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Angiogenesis
Angiogenesis inhibitors
Antitumor agents
Brain, neoplasm
Drug delivery systems
Kidney, neoplasm
Mammary gland, neoplasm
Neoplasm
Prostate gland, neoplasm
(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Endothelium
(vascular; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701201-26-5D, biotinylated
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701200-82-0P 701201-01-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 81658-55-1P 701200-81-9P 701200-83-1P 701200-84-2P 701200-85-3P
701200-86-4P 701200-87-5P 701200-88-6P 701200-89-7P 701200-90-0P
701200-91-1P 701200-92-2P 701200-93-3P 701200-94-4P 701200-95-5P
701200-96-6P 701200-97-7P 701200-98-8P 701200-99-9P 701201-00-5P
701201-02-7P 701201-03-8P 701201-04-9P 701201-05-0P 701201-06-1P
701201-07-2P 701201-08-3P 701201-09-4P 701201-10-7P 701201-11-8P
701201-12-9P 701201-13-0P 701201-14-1P 701201-15-2P 701201-16-3P
701201-17-4P 701201-18-5P 701201-19-6P 701201-20-9P 701201-21-0P
701201-22-1P 701201-23-2P 701201-24-3P 701201-25-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701201-28-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 98-88-4, Benzoyl chloride 100-39-0, Benzyl bromide 106-95-6, Allyl bromide, reactions 930-69-8 1212-08-4, S-Phenyl benzenethiosulfonate 2719-27-9, Cyclohexanoyl chloride 2937-50-0, Allyl chloroformate 2949-92-0, S-Methyl methanethiosulfonate 3282-30-2, Pivaloyl chloride 5271-67-0, 2-Thiophenecarbonyl chloride 6482-24-2, 2-Bromoethyl methylether 7031-27-8, (Phenylthio)acetyl chloride 10400-19-8, Nicotinoyl chloride 25644-88-6, S-Benzyl-L-cysteine sulfone 82911-69-1 262438-43-7 475150-36-8 701201-27-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

L1 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:849621 HCAPLUS

DN 137:353056

ED Entered STN: 08 Nov 2002

TI Preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors.

IN Chung, Yong-Jun; Lee, Keyong-Ho; Kim, Youn-Chul; Park, Ho-Jin

PA Kolon Ind. Inc., S. Korea

SO PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D403-12

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002088115	A1	20021107	WO 2002-KR759	20020424
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	KR 2002083084	A	20021101	KR 2001-22767	20010426
	KR 2003047127	A	20030618	KR 2001-77522	20011207
	KR 2003075322	A	20030926	KR 2002-14481	20020318
	EP 1389204	A1	20040218	EP 2002-720668	20020424
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	JP 2004533435	T2	20041104	JP 2002-585415	20020424
	US 2004138206	A1	20040715	US 2003-475539	20031211 <--
PRAI	KR 2001-22767	A	20010426		
	KR 2001-77522	A	20011207		
	KR 2002-14481	A	20020318		
	WO 2002-KR759	W	20020424		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2002088115	ICM	C07D403-12
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WO 2002088115 ECLA C07C311/19; C07C311/29; C07D241/04; C07D241/08;
C07D243/08; C07D245/02; C07D403/12+241B+207

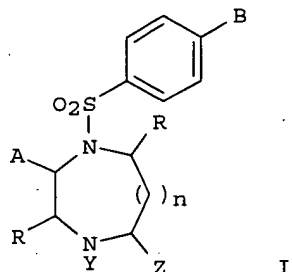
JP 2004533435 FTERM 4C063/AA01; 4C063/BB03; 4C063/BB08; 4C063/CC34;
4C063/DD04; 4C063/DD12; 4C063/EE01; 4C086/AA01;
4C086/AA02; 4C086/AA03; 4C086/AA04; 4C086/BC49;
4C086/BC73; 4C086/GA07; 4C086/GA08; 4C086/GA09;
4C086/GA12; 4C086/MA01; 4C086/MA04; 4C086/NA14;
4C086/ZA33; 4C086/ZA44; 4C086/ZA45; 4C086/ZA67;
4C086/ZA68; 4C086/ZA89; 4C086/ZA96; 4C086/ZA97;
4C086/ZB11; 4C086/ZB15; 4C086/ZB26; 4C086/ZC06;
4C086/ZC35; 4C086/ZC55; 4H006/AA01; 4H006/AA02;
4H006/AB84

US 2004138206 NCL 514/218.000; 514/254.010; 514/255.020; 514/183.000;
540/575.000; 540/474.000; 544/372.000; 544/383.000

ECLA C07C311/19; C07C311/29; C07D241/04; C07D241/08;
C07D243/08; C07D245/02; C07D403/12+241B+207 <--

OS MARPAT 137:353056

GI



AB Title compds. [I; n = 0-3; A = CO₂H, CONHOH, CH₂SH, CH₂OH; B = H, alkyl, NO₂, aryl, heteroaryl, pyrrolyl, halo, alkoxy, aryloxy, alkylamino, alkylthio, CONHR, NHCOR, NHCO₂R, NHCONHR, etc.; R = H, alkyl, aryl, heteroaryl, tetragonal to octagonal cyclic compound, alkyl substituted by a tetragonal to octagonal (hetero)cyclic compound; Z = H, O, S, provided that when Z = O, S it takes a double bond; Y = H, alkyl, aryl, heteroaryl, alkyl substituted by a tetragonal to octagonal cyclic compound, alkyl substituted by a tetragonal to octagonal heterocyclyl, CONHR, NHCOR, NHCO₂R, NHCONHR, alkyl having a double or triple bond], were prepared Thus, Me 1-(4-methoxybenzenesulfonyl)-5-oxopiperazine-2-carboxylate (preparation given) was stirred 5 h with aqueous NH₂OH to give 45% 1-(4-methoxybenzenesulfonyl)-5-oxopiperazine-2-hydroxamic acid. This inhibited MMP-2 with IC₅₀ = 0.004 μM. I are angiogenesis controlling materials that can inhibit overexpression of matrix metalloproteinase that decomp. protein constituents in extracellular matrix and basement membranes of connective tissues.

ST benzenesulfonylpiperazine prepn matrix metalloproteinase inhibitor; cancer angiogenesis inhibitor prepn benzenesulfonylpiperazine; hydroxamate benzenesulfonylpiperazine prepn anticancer; piperazinehydroxamate arylsulfonyl prepn mmp inhibitor

IT Antitumor agents
Human
(preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT Hydroxamic acids
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT Angiogenesis
Neoplasm

(treatment; preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT 9001-12-1, Matrix metalloproteinase-1 146480-35-5, Matrix metalloproteinase-2 146480-36-6, Matrix metalloproteinase-9 161384-17-4, Matrix metalloproteinase-14 175449-82-8, Matrix metalloproteinase-13

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT 184349-80-2P 474410-18-9P 474410-20-3P 474410-22-5P 474410-24-7P 474410-25-8P 474410-27-0P 474410-28-1P 474410-30-5P 474410-31-6P 474410-33-8P 474410-34-9P 474410-35-0P 474410-36-1P 474410-37-2P 474410-38-3P 474410-39-4P 474410-40-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT 74-89-5, Methylamine, reactions 98-68-0, 4-Methoxybenzenesulfonyl chloride 100-46-9, Benzylamine, reactions 105-36-2, Ethyl bromoacetate 109-73-9, n-Butylamine, reactions 111-26-2, Hexylamine 111-86-4, Octylamine 112-90-3, Oleylamine 507-09-5, Thiolacetic acid, reactions 696-59-3, 2,5-Dimethoxytetrahydrofuran 765-30-0, Cyclopropylamine 2016-57-1, Decylamine 2038-03-1, N-(2-Aminoethyl)morpholine 2706-56-1, 2-(2-Aminoethyl)pyridine 3731-51-9, 2-Aminomethylpyridine 5619-04-5, DL-Serine methyl ester hydrochloride 5874-57-7 13610-11-2 27578-60-5, 1-(2-Aminoethyl)piperidine 202752-04-3 474410-63-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

IT 85622-74-8P 184350-19-4P 474410-41-8P 474410-42-9P 474410-43-0P 474410-44-1P 474410-45-2P 474410-46-3P 474410-47-4P 474410-48-5P 474410-49-6P 474410-50-9P 474410-51-0P 474410-52-1P 474410-53-2P 474410-54-3P 474410-55-4P 474410-56-5P 474410-57-6P 474410-58-7P 474410-59-8P 474410-60-1P 474410-61-2P 474410-62-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzenesulfonylpiperazines as matrix metalloproteinase inhibitors)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Agouron Pharmaceuticals Inc; US 5753653 1996 HCAPLUS

(2) Anon; J MED CHEM 2000, V43(3), P369

(3) Fujisawa Pharmaceutical Co Ltd; WO 9827069 A 1998 HCAPLUS

(4) Nippon Soda Co Ltd; WO 0102371 A 2001 HCAPLUS

(5) Pfizer Inc; WO 9633172 A 1996 HCAPLUS

=> b wpix

FILE 'WPIX' ENTERED AT 08:25:30 ON 03 AUG 2005
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FILE LAST UPDATED: 2 AUG 2005 <20050802/UP>
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=> d all 14 tot

L4 ANSWER 1 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2004-561873 [54] WPIX

CR 2004-450190 [42]

DNC C2004-205382

TI New peptide derivatives having anti-tumor activity useful for the
treatment, prevention or detection of cancer.

DC B03 B04

IN ALLAN, A L; DONATE, F; GLADSTONE, P L; MAZAR, A; PARRY, G; TERNANSKY, R J;
YOON, W H

PA (ATTE-N) ATTENUON LLC; (ALLA-I) ALLAN A L; (DONA-I) DONATE F; (GLAD-I)
GLADSTONE P L; (MAZA-I) MAZAR A; (PARR-I) PARRY G; (TERN-I) TERNANSKY R J;
(YOON-I) YOON W H

CYC 107

PI WO 2004063213 A2 20040729 (200454)* EN 117 C07K000-00

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE

LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE

DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM

PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ

VC VN YU ZA ZM ZW

AU 2003298726 A1 20040810 (200479) C07K000-00

US 2005020810 A1 20050127 (200509) C07K007-08 <--

ADT WO 2004063213 A2 WO 2003-US37895 20031125; AU 2003298726 A1 AU 2003-298726
20031125; US 2005020810 A1 Provisional US 2002-429174P 20021125,
Provisional US 2003-475539P 20030602, US 2003-722843 20031125

FDT AU 2003298726 A1 Based on WO 2004063213

PRAI US 2003-475539P 20030602; US 2002-429174P

20021125; US 2003-722843 20031125

IC ICM C07K000-00; C07K007-08

ICS C07K007-06

AB WO2004063213 A UPAB: 20050207

NOVELTY - Peptide derivatives (I) and their salts, solvates, hydrates or
N-oxides are new.

DETAILED DESCRIPTION - Peptide derivatives of formula (I) and their
salts, solvates, hydrates or N-oxides are new.

j, k = 0-1;

p, q = 0-100;

r, s = 0-1;

R1 = (substituted) acyl, acyl chelate, (substituted) alkyl,
(substituted) cycloalkyl or (substituted) imino;

R2 = 1-6C alkyl with at least H replaced by a substituents of NR6R7,
-OR8, -CO2R9, -S(O)2R10, -P(OR11)OR12 or (substituted) aryl;

R6-R12 = H or R1;

X1 = NH(C=C)gCO-, NH(CH2)hCO- or NHCH(CH3)CO-;

g, h = 1-6;

X2 = cyclic derivative of formula (i-iii);

X3 = imidazole derivative of formula (iv);

X4 = alcohol derivative of formula (v-vi);

l = 1-4;

X5 = sulfonyl derivative of formula (vii);

R13 = H, (substituted) alkyl, (substituted) acyl, (substituted) arylalkyl, (substituted) aryl or -S(O)nR14;
 n = 1-5;
 R14 = (substituted) alkyl, (substituted) acyl, (substituted) arylalkyl or (substituted) aryl;
 x, y = 0-2;
 X6 = amide derivative formula (viii);
 m = 1-4;
 X7 = NH(C=C)dCO-, -NH(CH2)eCO or -NHCH(CH3)CO-;
 d, e = 1-6;
 R3 = 1-6C alkyl with at least H replace by a substituent of -NR15R16, -OR17, -CO2R18, -S(O)nR19, -P(OR20)OR21 or (substituted) aryl;
 R4, R5 = H or (substituted) alkyl; and
 R15-R21 = H, (substituted) acyl, acyl chelate, (substituted) alkyl, (substituted) cycloalkyl or (substituted) imino.
 Provided that R1 is not acetyl when R4 and R5 are H and r and s 0.
 ACTIVITY - Cytostatic; Antiangiogenic.
 Tests details are described but no results given.
 MECHANISM OF ACTION - None given
 USE - (I) are useful for the treatment, prevention or detection of cancer (claimed), tumor growth, metastasis and angiogenesis.

Dwg.0/0

FS

FA AB; GI; DCN

MC CPI: B02-D; B04-C01B; B04-C01C; B04-C01D; B04-C01E; B04-C01F; B04-C01G; B04-N04A; B14-H01

L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2004-450190 [42] WPIX

CR 2004-561873 [54]

DNC C2004-168702

TI Novel peptides useful as e.g. angiogenesis inhibitors for treating or preventing cancer, e.g. breast cancer, renal cancer, brain cancer, colon cancer.

DC B03

IN ALLAN, A L; DONATE, F; GLADSTONE, P L; HOPKINS, S A; MAZAR, A; O'HARE, S M; PARRY, G; PLUNKETT, M; TERNANSKY, R J; YOON, W H; PLUNKETT, M L
 PA (ALLA-I) ALLAN A L; (DONA-I) DONATE F; (GLAD-I) GLADSTONE P L; (HOPK-I) HOPKINS S A; (MAZA-I) MAZAR A; (OHAR-I) O'HARE S M; (PARR-I) PARRY G; (PLUN-I) PLUNKETT M; (TERN-I) TERNANSKY R J; (YOON-I) YOON W H; (ATTE-N) ATTENUON LLC

CYC 106

PI WO 2004047771 A2 20040610 (200442)* EN 88 A61K000-00
 RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE
 LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH
 PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN
 YU ZA ZM ZW

US 2004162239 A1 20040819 (200455) A61K038-08

AU 2003297609 A1 20040618 (200471) A61K000-00

ADT WO 2004047771 A2 WO 2003-US38175 20031125; US 2004162239 A1
 Provisional US 2002-429174P 20021125, Provisional US
 2003-475539P 20030602, US 2003-723144 20031125; AU 2003297609 A1 AU
 2003-297609 20031125

FDT AU 2003297609 A1 Based on WO 2004047771

PRAI US 2003-475539P 20030602; US 2002-429174P
 20021125; US 2003-723144 20031125

IC ICM A61K000-00; A61K038-08

ICS A61K038-10; C07K007-06; C07K007-08

AB WO2004047771 A UPAB: 20041104

NOVELTY - Peptides are new.

DETAILED DESCRIPTION - Peptides of formula R1-Ax-By-C'z-(N-CH(R2)-C(O))a-(N-CH(R3)-C(O))b-R4 (I), their salt, solvates, hydrates or N-oxides are new.

a, b and x - z = 0 or 1;
 A = cyclic amino acid;
 B = basic amino acid;
 C' = small amino acid;
 R1 = (hetero)alkyl, acyl, alkylsulfonyl, (hetero)arylalkyl,
 (hetero)arylsulfonyl or oxycarbonyl (all optionally substituted);
 R2 = alkyl, -(CH₂)_mS(O)nR₅, -(CH₂)_mS(O)n-S(O)OR₅ or -(CMe)_mS(O)nR₅;
 m = 1-4;
 n and o = 0-2;
 R3 = -CH₂CONH₂ or -CH₂CH₂CONH₂;
 R4 = alkyl, -NR₆R₇ or -OR₈;
 R5 = (hetero)alkyl, acyl, (hetero)aryl, (hetero)arylalkyl or
 oxycarbonyl (all optionally substituted);
 R6, R7 = H or alkyl;
 R8 = (hetero)alkyl, (hetero)aryl or (hetero)arylalkyl (all optionally
 substituted).
 Provided that:
 (1) when m is 1, R5 is other than methyl;
 (2) a is 1 unless A is proline, B is histidine, C is serine;
 (3) when a is 0, b is 0; and
 (4) R2 is -(CH₂)_mS(O)nR₅ or -(CH₂)_mS(O)n-S(O)OR₅ unless b, x, y and z
 are 1.

An INDEPENDENT CLAIM is also included for treatment or prevention of cancer involving administering (I) optionally with an anti-cancer agent.

ACTIVITY - Cytostatic; Antiangiogenic; Antiarthritic; Antidiabetic; Antiarteriosclerotic; Ophthalmological; Vulnerary; Antirheumatic; Dermatological; Antipsoriatic; Antiparasitic; Osteopathic; Vasotropic; Tranquilizer; Thrombolytic; Gynecological; Antiinflammatory; Respiratory-Gen.; Antiulcer; Antisickling.

MECHANISM OF ACTION - Angiogenesis inhibitor; Cell migration, cell invasion and cell proliferation inhibitor; Tumor growth inhibitor.

Acetyl-Pro-His-Ser-Cys(S-tert-Bu)-Asn-NH₂ (A) was tested in vivo for its ability to inhibit FGF-2 mediated angiogenesis in a Matrigel Plug (RTM) model according to Passaniti et al., 1992, Lab Invest. 67:519-528.

(A) showed % inhibition of 88.2 plus or minus 42.9.

USE - (I) Are used for treating or preventing cancer e.g. breast cancer, renal cancer, brain cancer, colon cancer, prostate cancer, chondrosarcoma or angiosarcoma (claimed); for treating diseases associated with aberrant vascularization including arthritis, diabetes, arteriosclerosis, arteriovenous malformation, corneal graft neovascularization, delayed wound healing, diabetic retinopathy, age related macular degeneration, granulation burn, hemophilic joint, rheumatoid arthritis, hypertrophic scar, neovascular glaucoma, nonunion fracture, Osier Weber Syndrome, psoriasis, retrolental fibroplasia, pterygium, scleroderma, trachoma, vascular adhesion, ocular neovascularization, parasitic disease, hypertrophy following surgery, inhibition of hair growth, macular degeneration, osteoarthritis, benign hyperplasia, atherosclerosis, myocardial angiogenesis, post-balloon angioplasty vascular restenosis, neointima formation following vascular trauma, vascular graft restenosis, coronary collateral formation, deep venous thrombosis, ischemic limb angiogenesis; telangiectasia, pyogenic granuloma, corneal disease, rubeosis, neovascular glaucoma, diabetic and other retinopathy, retrolental fibroplasias, diabetic neovascularization, endometriosis, fibrosis associated with a chronic inflammatory condition, traumatic spinal cord injury including ischemia, scarring or fibrosis, lung fibrosis, chemotherapy-induced fibrosis; wound healing with scarring and fibrosis, peptic ulcers, a bone fracture, keloids, or a disorder of vasculogenesis, hematopoiesis, ovulation, menstruation, pregnancy or placentation associated with pathogenic cell invasion or with angiogenesis, retinopathy of prematurity, sickle cell retinopathy or retinal vein occlusion; for treating uterine disease; to detect or image disease or conditions associated with undesired cell migration, invasion or proliferation.

ADVANTAGE - The compounds (I) are potent inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation.

Dwg. 0/5

FS CPI
 FA AB; DCN
 MC CPI: B04-C01A; B06-H; B07-H; B10-A04; B10-A08; B10-A10; B10-A12C; B10-B02;
 B10-D03; B14-B02; B14-C03; B14-C09; B14-D01B; B14-D01C; B14-E08;
 B14-F02; B14-F03; B14-F04; B14-F07; B14-H01; B14-K01; B14-L06;
 B14-N01; B14-N03; B14-N14; B14-N16; B14-N17; B14-P02; B14-R02;
 B14-S04

L4 ANSWER 3 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
 AN 2003-103447 [09] WPIX
 DNC C2003-026138
 TI New sulfonamide derivatives useful in the treatment of e.g. cancer.
 DC B03
 IN CHUNG, Y; KIM, Y; LEE, K; PARK, H; JUNG, Y J; KIM, Y C; LEE, G H; PARK, H
 J; CHUNG, Y J
 PA (KOLO-N) KOLON IND INC; (CHUN-I) CHUNG Y; (KIMY-I) KIM Y; (LEEK-I) LEE K;
 (PARK-I) PARK H
 CYC 101
 PI WO 2002088115 A1 20021107 (200309)* EN 71 C07D403-12
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZM ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KZ
 LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO
 RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
 KR 2002083084 A 20021101 (200319) C07D403-00
 KR 2003047127 A 20030618 (200370) C07D241-04
 KR 2003075322 A 20030926 (200409) C07D403-12
 EP 1389204 A1 20040218 (200413) EN C07D403-12
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 AU 2002251588 A1 20021111 (200433) C07D403-12
 US 2004138206 A1 20040715 (200447) A61K031-551
 KR 432928 B 20040528 (200463) C07D403-00
 JP 2004533435 W 20041104 (200472) 120 C07D241-08
 ADT WO 2002088115 A1 WO 2002-KR759 20020424; KR 2002083084 A KR 2001-22767
 20010426; KR 2003047127 A KR 2001-77522 20011207; KR 2003075322 A KR
 2002-14481 20020318; EP 1389204 A1 EP 2002-720668 20020424, WO 2002-KR759
 20020424; AU 2002251588 A1 AU 2002-251588 20020424; US 2004138206 A1 WO
 2002-KR759 20020424, US 2003-475539 20031211; KR 432928 B KR
 2001-22767 20010426; JP 2004533435 W JP 2002-585415 20020424, WO
 2002-KR759 20020424
 FDT EP 1389204 A1 Based on WO 2002088115; AU 2002251588 A1 Based on WO
 2002088115; KR 432928 B Previous Publ. KR 2002083084; JP 2004533435 W
 Based on WO 2002088115
 PRAI KR 2002-14481 20020318; KR 2001-22767 20010426;
 KR 2001-77522 20011207
 IC ICM A61K031-551; C07D241-04; C07D241-08; C07D403-00; C07D403-12
 ICS A61K031-495; A61K031-496; A61K031-5377; A61P001-02; A61P001-04;
 A61P003-10; A61P005-18; A61P009-10; A61P009-14; A61P017-00;
 A61P017-02; A61P017-10; A61P019-00; A61P019-02; A61P019-10;
 A61P027-02; A61P029-00; A61P031-18; A61P035-00; A61P035-04;
 A61P043-00; C07C303-40; C07C311-19; C07D401-06
 AB WO 200288115 A UPAB: 20030206
 NOVELTY - New sulfonamide derivatives of formula (I), their optical
 isomers, salts or solvates.
 DETAILED DESCRIPTION - Sulfonamide derivatives of formula (I), their
 optical isomers, salts or solvates are new.
 n = 0 -3;
 A = CO₂H, CONHOH, CH₂SH or CH₂OH;
 B = H, 1-8C lower alkyl, nitro, aryl, heteroaryl, pyrrole, halo,
 1-8C O-lower alkyl, O-aryl, N-lower alkyl, S-lower alkyl, phenyl
 (substituted by X), amide compound of formula CONHR or NHCOR, carbamate
 compound of formula NHCOOR or urea compound of formula NHCONHR;
 X = H, 1-8C lower alkyl, 9-20C higher alkyl, 9-20C higher alkyl
 comprising a double bond, (hetero)aryl, halo, O-lower alkyl, O-aryl,

O-heteroaryl, N-aryl, N-heteroaryl, S-aryl, S-heteroaryl, 1-20C alkyl-amine derivative, 1-20C alkyl-carboxylic acid derivative, amine or nitro;

R = H, 1-8C lower alkyl, (hetero)aryl, tetragonal to octagonal (hetero)cyclic compound or 1-8C lower alkyl (substituted by tetragonal to octagonal (hetero)cyclic compound);

Z = H, O or S;

Y = H, 1-18C alkyl, (hetero)aryl, 1-8C lower alkyl (substituted by a tetragonal to octagonal (hetero)cyclic compound), amide compound of formula CONHR or NHCOR, carbamate compound of formula NHCOOR, urea compound of formula NHCONHR, 1-8C lower alkyl having a double or a triple bond, 9-20C higher alkyl having a double or a triple bond.

Provided that when Z is O or S the C(ring atom)-Z bond is a double bond.

INDEPENDENT CLAIMS are also included for:

- (1) Preparation of (I);
- (2) New 4-phenylsulfonyl-piperazine intermediates (II);
- (3) Preparation of (II) comprising reaction of a substituted phenylsulfamide of formula (III) with methanesulfonyl chloride, toluenesulfonyl chloride or triflic anhydride in the presence of a base, and reaction of the product with primary amine;
- (4) New substituted phenylsulfamide of formula (III); and
- (5) Preparation of (III) comprising reaction of the compound of formula (IV) with ethyl bromoacetate and halogen in presence of an inorganic base and N,N-dimethyl formamide or acetonitrile solvent.

W and X = H, methyl, ethyl, t-butyl or 1-8C lower alkyl group comprising a benzyl group.

ACTIVITY - Cytostatic; Antiarteriosclerotic; Ophthalmological; Antidiabetic; Antiarthritic; Antirheumatic; Antiinflammatory; Antiulcer; Osteopathic; Antiseborrheic; Dermatological; Anti-HIV; Antipsoriatic; Vulnerary.

MECHANISM OF ACTION - Matrix metalloproteinase (MMP) inhibitor.

The MMP inhibitor activities were measured by fluorescence assay as described by Knight, C. G., Willenbrock, F., Murphy, G. A., FEBS Lett. 1992, 296, 263-266. For 1-(4'-bromo-biphenyl-4-sulfonyl)-4-octyl-5-oxo-piperazine-2-hydroxamate. The results indicated an IC50 (μM) value of 0.016, 0.002, 0.0013 and 0.007 for MMP-1, MMP-2, MMP-9 and MMP-13 respectively.

USE - In the treatment of cancer metastasis, solid cancer and angiogenesis (claimed). Also useful in the treatment of cardiovascular disease (e.g. hemangioma, angiofibroma), angiostenosis, edematous sclerosis, eye diseases caused by angiogenesis, corneal transplantation, angiogenic glaucoma, diabetic retinopathy, angiogenic corneal disease, age-related macular degeneration, pterygium, retinal degeneration, retrolental fibroplasias, granular conjunctivitis, skin diseases caused by angiogenesis (e.g. chronic inflammatory diseases e.g. arthritis, psoriasis, telangiectasis, granuloma pyogenicum, seborrheic dermatitis), periodontal disease, tumors, rheumatoid arthritis, inflammation, hyperparathyroidism, diabetes, corneal ulcers, osteoporosis, stomach ulcers, wounds, wrinkles, acne, AIDS, burns, arteriosclerosis, bone fractures.

ADVANTAGE - The compound is a potent proteinase inhibitor.

Dwg.0/0.

FS CPI

FA AB; GI; DCN

MC CPI: B07-D03; B07-D11; B10-A08; B14-C03; B14-C09; B14-D07C; B14-E08; B14-F01; B14-F02F2; B14-F07; B14-G01B; B14-H01; B14-N01; B14-N03; B14-N06B; B14-N11; B14-N17; B14-S04; N02-F01

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FILE 'HOME' ENTERED AT 08:25:39 ON 03 AUG 2005

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=> d his full

(FILE 'HOME' ENTERED AT 08:23:24 ON 03 AUG 2005)

FILE 'HCAPLUS' ENTERED AT 08:23:29 ON 03 AUG 2005

L1 3 SEA ABB=ON PLU=ON US2005020810/PN OR (US2002-429174# OR
US2003-475539#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 08:24:34 ON 03 AUG 2005

FILE 'HCAPLUS' ENTERED AT 08:24:34 ON 03 AUG 2005

L2 TRA L1 1- RN : 209 TERMS

FILE 'REGISTRY' ENTERED AT 08:24:34 ON 03 AUG 2005

L3 209 SEA ABB=ON PLU=ON L2

FILE 'WPIX' ENTERED AT 08:24:39 ON 03 AUG 2005

L4 3 SEA ABB=ON PLU=ON US2005020810/PN OR (US2002-429174# OR
US2003-475539#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 08:32:11 ON 03 AUG 2005

L5 STR

L6 3 SEA CSS SAM L5

L7 125 SEA CSS FUL L5

L8 91 SEA ABB=ON PLU=ON L7 AND L3

FILE 'HCAPLUS' ENTERED AT 08:40:53 ON 03 AUG 2005

E TERNANSKY R/AU

L9 59 SEA ABB=ON PLU=ON ("TERNANSKY R J"/AU OR "TERNANSKY ROBERT"/A
U OR "TERNANSKY ROBERT J"/AU OR "TERNANSKY ROBERT JOHN"/AU OR
"TERNANSKY ROBERTJ"/AU)

E TERNANSKY B/AU

E ALLAN A/AU

L10 35 SEA ABB=ON PLU=ON ("ALLAN A"/AU OR "ALLAN A L"/AU)

E ALLAN AMY/AU

L11 6 SEA ABB=ON PLU=ON "ALLAN AMY L"/AU

E GLADSTONE P/AU

L12 27 SEA ABB=ON PLU=ON ("GLADSTONE P"/AU OR "GLADSTONE PATRICIA
L"/AU OR "GLADSTONE PATRICIA LOUISE"/AU OR "GLADSTONE PATRICIAL
"/AU)

E YOON W/AU

L13 13 SEA ABB=ON PLU=ON ("YOON W"/AU OR "YOON W H"/AU)

E YOON WON/AU

L14 10 SEA ABB=ON PLU=ON ("YOON WON"/AU OR "YOON WON HYUNG"/AU)

E YOON WONHY/AU

E PARRY G/AU

L15 180 SEA ABB=ON PLU=ON ("PARRY G"/AU OR "PARRY G A"/AU OR "PARRY
G C"/AU OR "PARRY G C N"/AU OR "PARRY G D R"/AU OR "PARRY G
J"/AU OR "PARRY G J G"/AU OR "PARRY G P"/AU OR "PARRY G R"/AU
OR "PARRY G S"/AU OR "PARRY G V"/AU OR "PARRY G W"/AU)

E PARRY GRAHAM/AU

L16 39 SEA ABB=ON PLU=ON ("PARRY GRAHAM"/AU OR "PARRY GRAHAM C"/AU
OR "PARRY GRAHAM C N"/AU)

E DONATE F/AU

L17 25 SEA ABB=ON PLU=ON ("DONATE F"/AU OR "DONATE F A"/AU OR
"DONATE FERNANDO"/AU)

E MAZAR A/AU

L18 72 SEA ABB=ON PLU=ON ("MAZAR A"/AU OR "MAZAR A P"/AU OR "MAZAR
ANDREW"/AU OR "MAZAR ANDREW P"/AU OR "MAZAR ANDREW PAUL"/AU)

E ATTENUON/CS,PA

L19 17 SEA ABB=ON PLU=ON (ATTENUON/CS OR ATTENUON/PA OR "ATTENUON L
L C"/CS OR "ATTENUON L L C"/PA OR "ATTENUON L L C SAN DIEGO CA
92121 USA"/CS OR "ATTENUON L L C USA"/CS OR "ATTENUON L L C
USA"/PA OR "ATTENUON.LLC"/CS OR "ATTENUON LLC"/PA OR "ATTENUON
LLC SAN DIEGO CA 92121 USA"/CS OR "ATTENUON LLC SAN DIEGO CA
USA"/CS OR "ATTENUON LLC USA"/CS OR "ATTENUON LLC USA"/PA)

Search done by Noble Jarrell

L20 37 SEA ABB=ON PLU=ON L7
L21 QUE ABB=ON PLU=ON PY<=2002 OR AY<=2002 OR PRY<=2002 OR
PRD<20021125 OR AD<20021125 OR PD<20021125
L22 3 SEA ABB=ON PLU=ON L20 AND (L9 OR L10 OR L11 OR L12 OR L13 OR
L14 OR L15 OR L16 OR L17 OR L18 OR L19)
L23 34 SEA ABB=ON PLU=ON L20 NOT L22
L24 32 SEA ABB=ON PLU=ON L23 AND L21
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 08:46:32 ON 03 AUG 2005

L25 34 SEA ABB=ON PLU=ON (252229-85-9/BI OR 262438-43-7/BI OR
400778-72-5/BI OR 599210-01-2/BI OR 73508-81-3/BI OR 252230-05-
0/BI OR 289886-58-4/BI OR 443339-97-7/BI OR 502166-83-8/BI OR
502167-78-4/BI OR 502167-93-3/BI OR 103516-77-4/BI OR 108526-54
-1/BI OR 292023-45-1/BI OR 294625-98-2/BI OR 328529-77-7/BI OR
364379-05-5/BI OR 443305-20-2/BI OR 443305-23-5/BI OR 457873-85
-7/BI OR 457874-17-8/BI OR 457874-75-8/BI OR 473627-10-0/BI OR
473627-28-0/BI OR 473627-44-0/BI OR 473628-58-9/BI OR 476173-05
-4/BI OR 502169-28-0/BI OR 610776-60-8/BI OR 647825-82-9/BI OR
657367-96-9/BI OR 657380-51-3/BI OR 679393-74-9/BI OR 851724-81
-7/BI)

FILE 'HCAOLD' ENTERED AT 08:46:59 ON 03 AUG 2005

L26 0 SEA ABB=ON PLU=ON L7

FILE 'USPATFULL, USPAT2' ENTERED AT 08:47:10 ON 03 AUG 2005

L27 14 SEA ABB=ON PLU=ON L7
E TERNANSKY R/AU
L28 38 SEA ABB=ON PLU=ON ("TERNANSKY ROBERT J"/AU OR "TERNANSKY
ROBERT JOHN"/AU)
E ALLAN A/AU
L29 4 SEA ABB=ON PLU=ON "ALLAN AMY L"/AU
E GLADSTONE P/AU
L30 11 SEA ABB=ON PLU=ON "GLADSTONE PATRICIA L"/AU
E YOON WAU
E YOON W/AU
L31 2 SEA ABB=ON PLU=ON "YOON WON HYUNG"/AU
E PARRY G/AU
L32 2 SEA ABB=ON PLU=ON "PARRY GRAHAM"/AU
E DONATE F/AU
L33 6 SEA ABB=ON PLU=ON "DONATE FERNANDO"/AU
E MAZAR A/AU
L34 12 SEA ABB=ON PLU=ON ("MAZAR ANDREW"/AU OR "MAZAR ANDREW P"/AU)
E ATTENUON/CS, PA
L35 2 SEA ABB=ON PLU=ON L27 AND (L28 OR L29 OR L30 OR L31 OR L32
OR L33 OR L34)
L36 12 SEA ABB=ON PLU=ON L27 NOT L35
L37 9 SEA ABB=ON PLU=ON L36 AND L21

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FILE 'REGISTRY' ENTERED AT 08:55:32 ON 03 AUG 2005

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STRUCTURE FILE UPDATES: 2 AUG 2005 HIGHEST RN 857941-82-3

DICTIONARY FILE UPDATES: 2 AUG 2005 HIGHEST RN 857941-82-3

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Search done by Noble Jarrell

conducting SmartSELECT searches.

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*
*****
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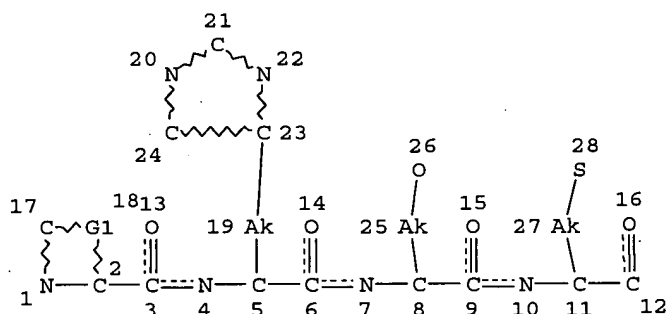
Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d que sta l7

L5 STR



REP G1=(1-3) C

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CONNECT IS M1 RC AT 12

CONNECT IS M1 RC AT 25

CONNECT IS M1 RC AT 28

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L7 125 SEA FILE=REGISTRY CSS FUL L5

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125 ANSWERS

SEARCH TIME: 00.00.07

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FILE COVERS 1907 - 3 Aug 2005 VOL 143 ISS 6
FILE LAST UPDATED: 2 Aug 2005 (20050802/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all fhitrstr l22 tot

L22 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:610128 HCAPLUS
DN 141:157478
ED Entered STN: 30 Jul 2004
TI Peptides which target tumor and endothelial cells, compositions and uses thereof
IN Allan, Amy L.; Yoon, Won Hyung; Gladstone, Patricia L.; Ternansky, Robert J.; Parry, Graham; Donate, Fernando; Mazar, Andrew
PA Attenuon, Llc, USA
SO PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 63

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004063213	A2	20040729	WO 2003-US37895	20031125
	WO 2004063213	A3	20050303		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2004162239	A1	20040819	US 2003-723144	20031125
	US 2005020810	A1	20050127	US 2003-722843	20031125
PRAI	US 2002-429174P	P	20021125		
	US 2003-475539P	P	20030602		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004063213	ICM	C07K
US 2004162239	NCL	514/012.000; 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/017.000; 514/018.000; 530/324.000; 530/325.000; 530/326.000
US 2005020810	NCL	530/324.000; 530/325.000; 530/326.000; 530/327.000; 530/328.000; 530/329.000

OS MARPAT 141:157478

AB The invention relates generally to peptide analogs of Ac-PHSCN-NH₂ which target tumor and endothelial cells and have antitumor, antiangiogenic and antimetastatic activity and to methods for their synthesis and use in

pharmaceutical compns. for treating, preventing and detecting diseases characterized by tumor growth, metastasis and angiogenesis. The peptide analogs may serve, inter alia, as carriers of radioactivity, PET-active compds., toxins, fluorescent mols. and PEG mols. Peptides
 $R1[(NHCHR2CO)0-1(X1)0-100]m-X2-X3-X4-X5-X6-[(X7)0-1(NHCHR3CO)0-1]nNR4R5$
 [R1 is (un)substituted acyl, alkyl, cycloalkyl or imino, or acyl chelate; R2 is substituted alkyl; R4, R5 are (un)substituted alkyl; X1, X7 are NH(CH:CH)1-6CO, NH(CH2)1-6CO, NHCHMeCO; X2-X6 are α -amino acids which are defined; m, n are 0 or 1, with the proviso that R1 is not acetyl when R4 and R5 are H and m and n are 0] are claimed. Thus, Ac-Pro-His-Ser-Cys(Ac)-Asn-OH was prepared by the solid-phase method and coupled to doxorubicin hydrochloride to afford the conjugate.

ST peptide prolylhistidylserylcysteiny laspartamide analog prepn antitumor
 IT Angiogenesis

Angiogenesis inhibitors

Antitumor agents

Neoplasm

(preparation of peptides which target tumor and endothelial cells)

IT Peptides, preparation

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

IT Polyoxyalkylenes, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

IT 729594-60-9P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

IT 7440-74-6DP, Indium, complexes with DPTA peptide conjugate

262438-43-7DP, analogs 729594-61-0P 729594-62-1P

729594-63-2P 729594-64-3P 729594-65-4P

729594-66-5P 729594-67-6P 729594-68-7P

729594-69-8P 729594-70-1P 729594-71-2P

729594-72-3P 729594-73-4P 729594-74-5P

729594-75-6P 729594-76-7P 729594-77-8P

729594-78-9P 729594-79-0P 729594-80-3P

729594-81-4P 729594-82-5P 729594-83-6P

729594-84-7P 729594-85-8P 729594-86-9P

729594-87-0P 729594-88-1P 729594-89-2P

729594-90-5P 729594-91-6P 729594-92-7P

729594-93-8P 729594-94-9P 729594-95-0P

729594-96-1P 729594-97-2P 729594-98-3P

729594-99-4P 729595-00-0P 729595-01-1P

729595-02-2P 729595-03-3DP, polyethylene glycol derivative

729595-04-4P 729595-05-5P 729595-06-6P

729595-07-7P 729595-08-8P 729595-09-9P

729595-14-6P 730960-54-0P 731003-01-3DP,

Indium complexes 731003-01-3P 731003-02-4P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

IT 456-22-4, 4 Fluorobenzoic acid 501-97-3 553-12-8 3301-79-9, 6 Carboxyfluorescein 13811-11-5 25316-40-9, Doxorubicin hydrochloride 34071-95-9 66134-67-6 76823-03-5, 5 Carboxyfluorescein 106966-68-1 137076-54-1, 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tris 1,1 dimethylethyl ester 517913-89-2 622405-78-1 729595-15-7

729595-16-8D, resin-bound 729595-17-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

IT 729595-10-2DP, resin-bound 729595-11-3DP, resin-bound 729595-12-4DP, resin-bound 729595-13-5DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of peptides which target tumor and endothelial cells)

IT 729594-60-9P

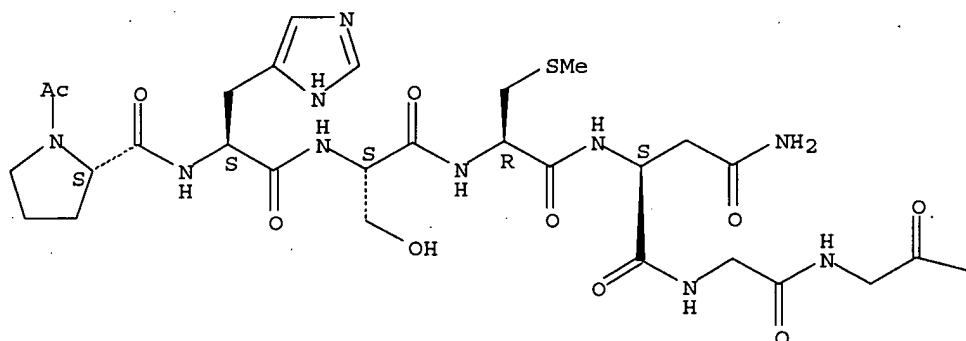
RL: DGN (Diagnostic use); PAC (Pharmacological activity); RCT (Reactant);
 SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of peptides which target tumor and endothelial cells)

RN 729594-60-9 HCAPLUS

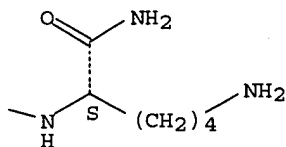
CN L-Lysinamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-methyl-L-cysteinyl-L-
 asparaginylglycylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L22 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:467702 HCAPLUS

DN 141:33798

ED Entered STN: 10 Jun 2004

TI Peptides which inhibit angiogenesis, cell migration, cell invasion and
 cell proliferation, their preparation, and compositions and therapeutic
 uses thereof

IN Allan, Amy L.; Donate, Fernando; Hopkins, Stephanie
 A.; Gladstone, Patricia L.; Mazar, Andrew; O'Hare,
 Sean M.; Parry, Graham; Plunkett, Marian L.; Ternansky,
 Robert J.; Yoon, Won Hyung

PA Attenuon, LLC, USA

SO PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DT Patent

LA English

Search done by Noble Jarrell

IC ICM A61K
 CC 1-8 (Pharmacology)
 Section cross-reference(s): 34, 63
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004047771	A2	20040610	WO 2003-US38175	20031125
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004162239	A1	20040819	US 2003-723144	20031125
	US 2005020810	A1	20050127	US 2003-722843	20031125
PRAI	US 2002-429174P	P	20021125		
	US 2003-475539P	P	20030602		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004047771	ICM	A61K
US 2004162239	NCL	514/012.000; 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/017.000; 514/018.000; 530/324.000; 530/325.000; 530/326.000
US 2005020810	NCL	530/324.000; 530/325.000; 530/326.000; 530/327.000; 530/328.000; 530/329.000

OS MARPAT 141:33798

AB The invention discloses peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, as well as methods of making the peptides, pharmaceutical compns. containing the peptides, and methods of using the peptides and pharmaceutical compns. to treat diseases associated with aberrant vascularization, e.g. cancer.

ST peptide cell invasion migration proliferation inhibition; antitumor aberrant vascularization disease peptide prepn

IT Sarcoma
 (cartilage chondrosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Cartilage, neoplasm
 (chondrosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Intestine, neoplasm
 (colon; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Blood vessel
 (endothelium; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Blood vessel, neoplasm
 Sarcoma
 (hemangiosarcoma; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Angiogenesis
 Angiogenesis inhibitors
 Antitumor agents
 Brain, neoplasm
 Drug delivery systems
 Kidney, neoplasm
 Mammary gland, neoplasm

Neoplasm

Prostate gland, neoplasm

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT Endothelium

(vascular; peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701201-26-5D, biotinylated

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701200-82-0P 701201-01-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 81658-55-1P 701200-81-9P 701200-83-1P

701200-84-2P 701200-85-3P 701200-86-4P 701200-87-5P

701200-88-6P 701200-89-7P 701200-90-0P

701200-91-1P 701200-92-2P 701200-93-3P

701200-94-4P 701200-95-5P 701200-96-6P 701200-97-7P 701200-98-8P

701200-99-9P 701201-00-5P 701201-02-7P

701201-03-8P 701201-04-9P 701201-05-0P

701201-06-1P 701201-07-2P 701201-08-3P

701201-09-4P 701201-10-7P 701201-11-8P

701201-12-9P 701201-13-0P 701201-14-1P

701201-15-2P 701201-16-3P 701201-17-4P

701201-18-5P 701201-19-6P 701201-20-9P

701201-21-0P 701201-22-1P 701201-23-2P 701201-24-3P

701201-25-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701201-28-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 98-88-4, Benzoyl chloride 100-39-0, Benzyl bromide 106-95-6, Allyl

bromide, reactions 930-69-8 1212-08-4, S-Phenyl benzenethiosulfonate

2719-27-9, Cyclohexanoyl chloride 2937-50-0, Allyl chloroformate

2949-92-0, S-Methyl methanethiosulfonate 3282-30-2, Pivaloyl chloride

5271-67-0, 2-Thiophenecarbonyl chloride 6482-24-2, 2-Bromoethyl

methylether 7031-27-8, (Phenylthio)acetyl chloride 10400-19-8,

Nicotinoyl chloride 25644-88-6, S-Benzyl-L-cysteine sulfone 82911-69-1

262438-43-7 475150-36-8 701201-27-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

IT 701200-82-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP

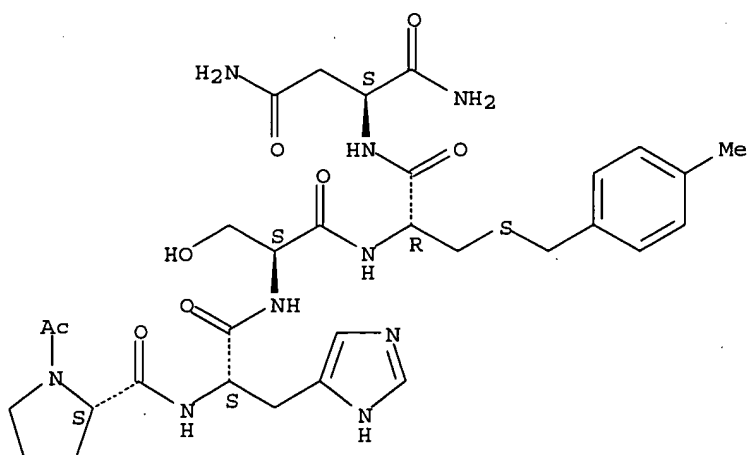
(Preparation); RACT (Reactant or reagent); USES (Uses)

(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

RN 701200-82-0 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methylphenyl)methyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L22 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:243058 HCAPLUS

DN 139:173332

ED Entered STN: 30 Mar 2003

TI Inhibition of integrin $\alpha 5 \beta 1$ function with a small peptide (ATN-161) plus continuous 5-FU infusion reduces colorectal liver metastases and improves survival in mice

AU Stoeltzing, Oliver; Liu, Wenbiao; Reinmuth, Niels; Fan, Fan; Parry, Graham C.; Parikh, Alexander A.; McCarty, Marya F.; Bucana, Corazon D.; Mazar, Andrew P.; Ellis, Lee M.

CS Department of Cancer Biology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030-4009, USA

SO International Journal of Cancer (2003), 104(4), 496-503

CODEN: IJCNAW; ISSN: 0020-7136

PB Wiley-Liss, Inc.

DT Journal

LA English

CC 1-6 (Pharmacology)

AB Integrin $\alpha 5 \beta 1$ is expressed on activated endothelial cells and plays a critical role in tumor angiogenesis. We hypothesized that a novel integrin $\alpha 5 \beta 1$ antagonist, ATN-161, would inhibit angiogenesis and growth of liver metastases in a murine model. We further hypothesized that combining ATN-161 with 5-fluorouracil (5-FU) chemotherapy would enhance the antineoplastic effect. Murine colon cancer cells (CT26) were injected into spleens of BALB/c mice to produce liver metastases. Four days thereafter, mice were given either ATN-161 (100 mg/kg, every 3rd day) or saline by i.p. injection, with or without combination of continuous-infusion 5-FU (100 mg/kg/2 wk), which was started on day 7. On day 20 after tumor cell inoculation, mice were killed and liver wts. and number of liver metastases were determined. A follow-up study on survival was also conducted in which mice were randomized to receive ATN-161, 5-FU or ATN-161+5-FU. Combination therapy with ATN-161+5-FU significantly reduced tumor burden (liver weight) and number of liver metastases ($p < 0.02$). Liver tumors in the ATN-161 and ATN-161+5-FU groups had significantly fewer microvessels ($p < 0.05$) than tumors in the control or 5-FU-treated groups. Unlike treatment with either agent alone, ATN-161+5-FU significantly increased tumor cell apoptosis and decreased tumor cell proliferation ($p < 0.03$) and improved overall survival ($p < 0.03$, log-rank test). Targeting integrin $\alpha 5 \beta 1$ in combination with 5-FU infusion reduced liver metastases formation and improved survival in this colon cancer model. The enhancement of antineoplastic activity from the combination of anti-angiogenic therapy and chemotherapy may be a promising approach for treating metastatic colorectal cancer.

ST ATN 161 fluorouracil colorectal cancer integrin

IT Intestine, neoplasm

- (colorectal; inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)
- IT Liver, neoplasm
(metastasis; inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)
- IT Drug interactions
(synergistic; inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)
- IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha 5\beta 1$; inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)
- IT 262438-43-7, ATN 161
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)
- IT 51-21-8, 5-Fluorouracil
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of integrin $\alpha 5\beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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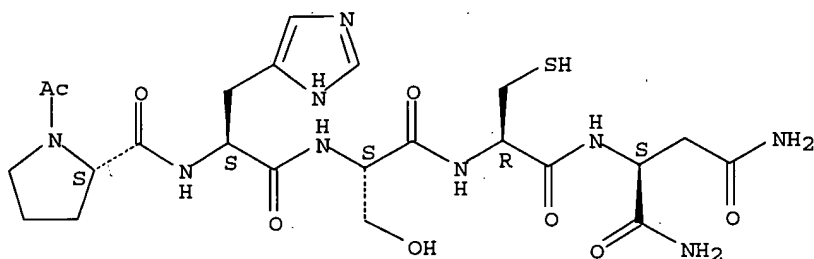
IT 262438-43-7, ATN 161

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhibition of integrin $\alpha 5 \beta 1$ function with ATN-161 plus 5-FU
 infusion reduces colorectal liver metastases and improves survival in
 mice)

RN 262438-43-7 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



=> d all hitstr 124 tot

L24 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:409130 HCAPLUS

DN 142:458903

ED Entered STN: 13 May 2005

TI Sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy

IN Sato, Aaron K.; Sexton, Daniel J.; Dransfield, Daniel T.; Ladner, Robert
 C.; Arbogast, Christophe; Bussat, Philippe; Fan, Hong; Khurana, Sudha;
 Linder, Karen E.; Marinelli, Edmund R.; Nanjappan, Palaniappa; Nunn,
 Adrian D.; Pillai, Radhakrishna; Pochon, Sibylle; Ramalingam,
 Kondareddiar; Shrivastava, Ajay; Song, Bo; Swenson, Rolf E.; Von Wronski,
 Mathew A.

PA Dyax Corporation, USA; Bracco International B. V.

SO U.S. Pat. Appl. Publ., 373 pp., Cont.-in-part of U.S. Ser. No. 382,082,
 abandoned.

CODEN: USXXCO

DT Patent

LA English

IC ICM G01N033-53

ICS C07K007-64; A61K038-12

INCL 435007100; 514009000; 530317000

CC 6-3 (General Biochemistry)

Section cross-reference(s): 1, 3

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005100963	A1	20050512	US 2003-661156	20030911 <--
	WO 2003074005	A2	20030912	WO 2003-US6731	20030303 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

Search done by Noble Jarrell

PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-360851P P 20020301 <--
 US 2003-440411P P 20030115
 US 2003-382082 B2 20030303
 WO 2003-US6731 A2 20030303

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2005100963	ICM	G01N033-53
	ICS	C07K007-64; A61K038-12
	INCL	435007100; 514009000; 530317000
US 2005100963	NCL	435/007.100; 514/009.000; 530/317.000
	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71 <--
WO 2003074005	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71 <--
AB	The present invention provides polypeptides, peptide dimer, and multimeric complexes comprising at least one binding moiety for KDR or VEGF/KDR complex, which have a variety of uses wherever treating, detecting, isolating or localizing angiogenesis is advantageous. Particularly disclosed are synthetic, isolated polypeptides capable of binding KDR or VEGF/KDR complex with high affinity (e.g., having a $KD < 1 \mu M$), and dimer and multimeric constructs comprising these polypeptides.	
ST	sequence KDR VEGF binding peptide dimer multimeric diagnosis therapy	
IT	Animal cell line (293, 293H, as host; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Imaging (NMR; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Animal cell line (SW480, inhibition of; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Imaging agents (acoustic imaging contrast agents; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Imaging (acoustic; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Antibodies and Immunoglobulins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses) (against KDR; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Radiotherapy (agent; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Infection (bacterial; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Intestine, neoplasm (colon, cell, inhibition of; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)	
IT	Escherichia coli	

- (enterohemorrhagic; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Gases
(fluorinated; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Protein motifs
(kinase domain region; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(linker; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Bubbles
(microbubbles, phospholipid stabilized; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Angiogenesis
(neovascularization; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Dyes
(optical; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Metals, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(paramagnetic ion; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Molecular association
(protein-protein interaction; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Angiogenesis
Animal
Anti-AIDS agents
Antibacterial agents
Antitumor agents
Antiviral agents
Blood serum
Chelating agents
Cytotoxic agents
Drugs
Fluorescent indicators
Fluorescent substances
Human
Human immunodeficiency virus
Labels
Liposomes
Malaria
Molecular cloning
Parasiticides
Protein sequences
Radiography
Simian hemorrhagic fever virus
Simian immunodeficiency virus
cDNA library
(sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)
- IT Avidins
Perfluorocarbons

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy)

IT Enzymes, biological studies
 Radionuclides, biological studies
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy)

IT Peptides, biological studies
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
 (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy)

IT Imaging
 (sonoluminescence, photoacoustic, optical; sequences of KDR and
 VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and
 their use in diagnosis and therapy)

IT Phospholipids, uses
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (stabilized microbubble; sequences of KDR and VEGF/KDR binding
 peptides, peptide dimers, and multimeric complexes and their use in
 diagnosis and therapy)

IT Particles
 (superparamagnetic; sequences of KDR and VEGF/KDR binding peptides,
 peptide dimers, and multimeric complexes and their use in diagnosis and
 therapy)

IT AIDS (disease)
 Neoplasm
 (treatment of; sequences of KDR and VEGF/KDR binding peptides, peptide
 dimers, and multimeric complexes and their use in diagnosis and
 therapy)

IT Vascular endothelial growth factor receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (type VEGFR-2; sequences of KDR and VEGF/KDR binding peptides, peptide
 dimers, and multimeric complexes and their use in diagnosis and
 therapy)

IT Infection
 (viral; sequences of KDR and VEGF/KDR binding peptides, peptide dimers,
 and multimeric complexes and their use in diagnosis and therapy)

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RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (amino acid sequence; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)

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RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (amino acid sequence; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)

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	851724-81-7	851724-82-8	851724-83-9	851724-84-0	
	851724-85-1	851724-86-2	851724-87-3	851724-88-4	851724-89-5
	851724-90-8	851724-91-9	851724-92-0	851724-93-1	851724-94-2
	851724-95-3	851724-96-4	851724-97-5	851724-98-6	851724-99-7
	851725-00-3	851725-01-4	851725-02-5	851725-03-6	851725-04-7
	851725-05-8	851725-06-9	851725-07-0	851725-08-1	851725-09-2
	851725-10-5	851725-11-6	851725-12-7	851725-13-8	851725-14-9
	851725-15-0	851725-16-1	851725-17-2	851725-18-3	851725-19-4
	851725-20-7	851725-21-8	851725-22-9	851725-23-0	851726-05-1
	851726-35-7	851733-12-5	851733-13-6	851733-14-7	851733-15-8
	851733-16-9	851733-17-0	851733-18-1	851733-19-2	851733-20-5
	851733-21-6	851733-22-7	851733-23-8	851733-24-9	851733-25-0
	851733-26-1	851733-27-2			

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (amino acid sequence; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)

IT	60-00-4, EDTA, uses	67-43-6, DTPA	75-63-8, Bromotrifluoromethane
	75-71-8, Dichlorodifluoromethane	75-73-0, Perfluoromethane	76-15-3
	76-16-4, Perfluoroethane	76-19-7, Perfluoropropane	353-59-3,
	Bromochlorodifluoromethane	355-25-9, Perfluorobutane	869-52-3, TTHA
	1170-02-1	1939-36-2, PDTA	2551-62-4, Sulfur hexafluoride
			9003-53-6D,
	Polystyrene, diisopropylaminomethylated	9013-20-1, Streptavidin	
	10043-49-9, 198Au, uses	10043-66-0, 131I, uses	10098-91-6, 90Y, uses
	13967-64-1, 165Dy, uses	13967-65-2, 166Ho, uses	13967-74-3, 141Ce,
	uses	13968-53-1, 103Ru, uses	13981-25-4, 64Cu, uses
			13981-28-7,
	140La, uses	13981-56-1, F 18, uses	13981-59-4, 117Sn, uses
	13982-36-0, 88Y, uses	14041-44-2, 175Yb, uses	14119-09-6, 67Ga, uses
	14133-76-7, uses	14158-30-6, 124I, uses	14158-31-7, 125I, uses
	14265-75-9, 177Lu, uses	14276-53-0, 62Cu, uses	14378-26-8, 188Re, uses
	14391-11-8, 199Au, uses	14391-19-6, 161Tb, uses	14391-22-1, 167Tm,
	uses	14391-96-9, 47Sc, uses	14392-02-0, 51Cr, uses
			14687-25-3,
	203Pb, uses	14701-22-5, Ni2+, uses	14733-03-0, 214Bi, uses
	14913-49-6, 212Bi, uses	14913-52-1, Nd3+, uses	14913-89-4, 105Rh, uses
	14981-64-7, 109Pd, uses	14998-63-1, 186Re, uses	15158-11-9, Cu2+, uses
	15229-37-5, 211Bi, uses	15438-31-0, Fe2+, uses	15715-08-9, 123I, uses
	15743-54-1, 168Yb, uses	15750-15-9, 111In, uses	15757-14-9, 68Ga, uses
	15757-86-5, 67Cu, uses	15758-35-7, 97Ru, uses	15765-31-8, 149Pm, uses
	15765-38-5, 76Br, uses	15765-39-6, 77Br, uses	15766-00-4, 153Sm, uses
	15776-20-2, 213Bi, uses	15840-01-4, 166Dy, uses	16065-83-1, Cr3+, uses
	16397-91-4, Mn2+, uses	16910-54-6, Eu2+, uses	18472-30-5, Er3+, uses
	20074-52-6, Fe3+, uses	22537-59-3, Pa4+, uses	22541-14-6, Pr3+, uses
	22541-17-9, uses	22541-18-0, Eu3+, uses	22541-19-1, Gd3+, uses
	22541-20-4, Tb3+, uses	22541-21-5, Dy3+, uses	22541-22-6, uses
	22541-53-3, Co2+, uses	22541-63-5, Co3+, uses	22541-75-9, Ti3+, uses
	35998-29-9, HBED	56491-86-2, NOTA	60239-18-1, DOTA
			60239-22-7, TETA

69146-59-4, MECAM 71353-07-6, LICAM 79642-50-5 104162-48-3, DOTMA
 114873-37-9, DO3A 157885-16-0, NeutrAvidin 325126-08-7, TETMA
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy)

IT 127464-60-2, VEGF
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and
 multimeric complexes and their use in diagnosis and therapy)

IT 851737-19-4 851737-20-7 851737-21-8 851737-22-9 851737-23-0
 851737-24-1 851737-25-2 851737-26-3 851737-27-4
 RL: PRP (Properties)
 (unclaimed nucleotide sequence; sequences of KDR and VEGF/KDR binding
 peptides, peptide dimers, and multimeric complexes and their use in
 diagnosis and therapy)

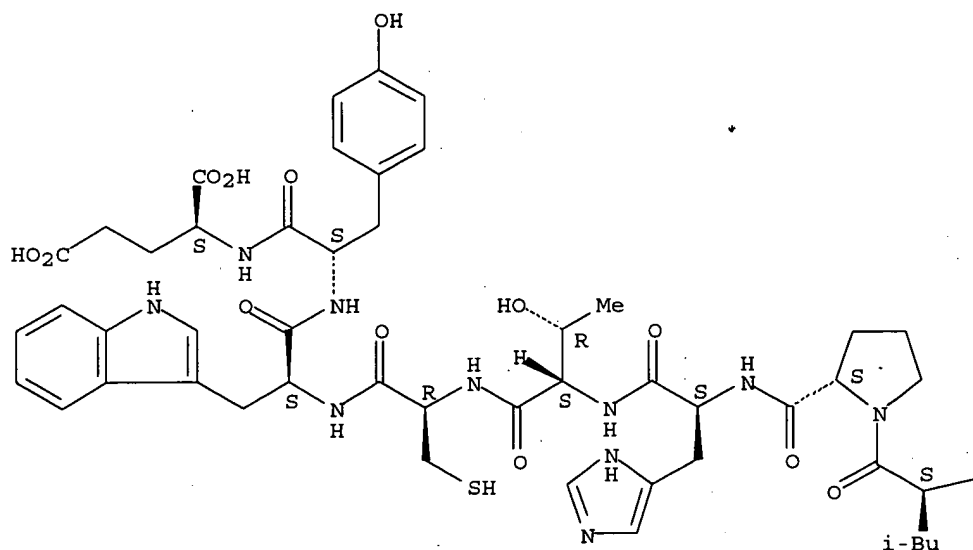
IT 851737-28-5 851737-29-6
 RL: PRP (Properties)
 (unclaimed protein sequence; sequences of KDR and VEGF/KDR binding
 peptides, peptide dimers, and multimeric complexes and their use in
 diagnosis and therapy)

IT 599210-01-2 851724-81-7
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
 (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (amino acid sequence; sequences of KDR and VEGF/KDR binding peptides,
 peptide dimers, and multimeric complexes and their use in diagnosis and
 therapy)

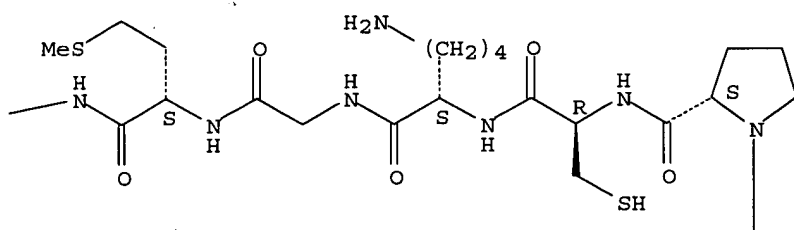
RN 599210-01-2 HCAPLUS
 CN L-Glutamic acid, glycyl-L-histidyl-L-prolyl-L-cysteinyl-L-lysylglycyl-L-
 methionyl-L-leucyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyl-L-tryptophyl-
 L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

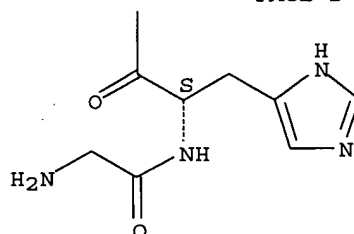
PAGE 1-A



PAGE 1-B



PAGE 2-B

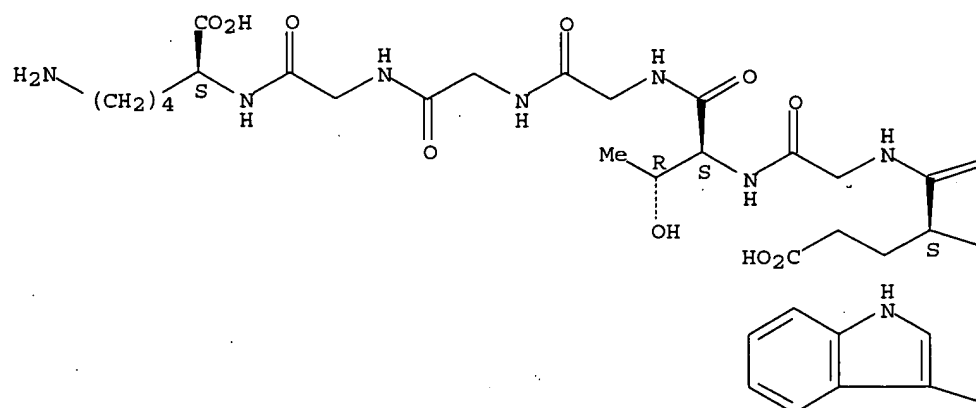


RN 851724-81-7 HCAPLUS

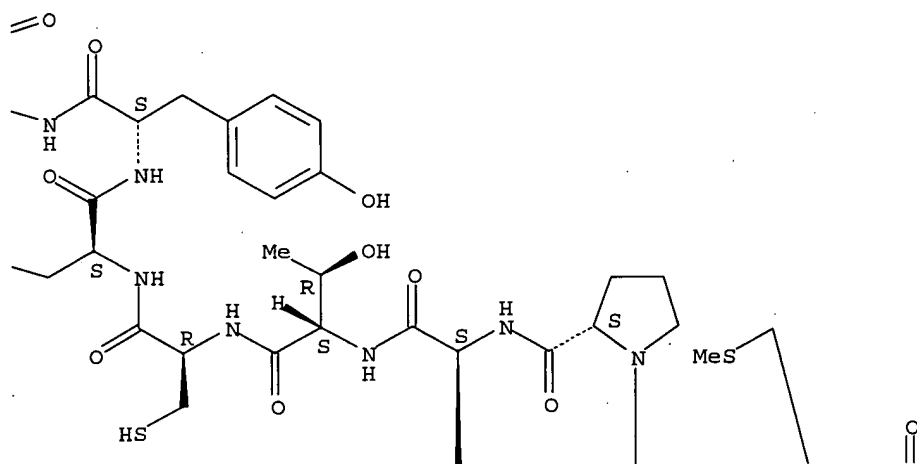
CN L-Lysine, L-alanylglycylglycyl-L-histidyl-L-prolyl-L-cysteinyll-L-lysylglycyl-L-methionyl-L-leucyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyll-L-tryptophyl-L-tyrosyl-L- α -glutamylglycyl-L-threonylglycylglycylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

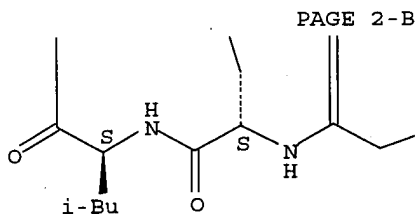
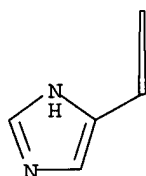
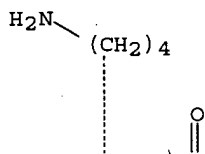
PAGE 1-A



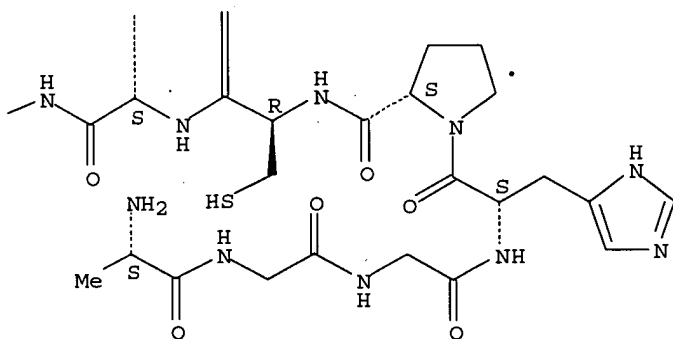
PAGE 1-B



PAGE 1-C



PAGE 2-C



L24 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:238537 HCAPLUS
 DN 142:310938
 ED Entered STN: 18 Mar 2005
 TI Fusion proteins composed of carotenoid-binding peptides and phenol
 oxidizing enzymes (phenol oxidase B or laccase), and their use in
 construction of detergent for bleaching carotenoid stain on fabric or

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surface
 IN Wolfgang, Aehle; Baldwin, Toby M.; Van Gastel, Franciscus J. C.; Janssen, Giselle G.; Murray, Christopher J.; Wang, Huaming; Winetzky, Deborah S.
 PA Neth.
 SO U.S. Pat. Appl. Publ., 107 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C12Q001-68
 ICS C07H021-04; C12N009-02; C11D003-386
 INCL 435006000; 435069100; 435189000; 435320100; 435325000; 536023200; 510320000
 CC 3-2 (Biochemical Genetics)
 Section cross-reference(s): 7, 10, 46

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2005058996	A1	20050317	US 2002-235043	20020903 <--
PRAI US 2002-235043		20020903	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2005058996	ICM	C12Q001-68
	ICS	C07H021-04; C12N009-02; C11D003-386
	INCL	435006000; 435069100; 435189000; 435320100; 435325000; 536023200; 510320000
US 2005058996	NCL	435/006.000; 435/069.100; 435/189.000; 435/320.100; 435/325.000; 536/023.200; 510/320.000
	ECLA	C11D003/386H; C12N009/02H3B2 <--

AB The invention provides numerous peptides composed of 7 or 12 amino acids that are able to bind to a carotenoid compound on a fabric. The invention relates said peptides: (a) may also contain a cysteine added to each end (defined as C-C derivs.); (b) comprise a repeatable motif; and (c) bind to tomato or paprika stains on cotton. The invention also provides chimeric proteins composed of said peptides linked to the C-terminus of a phenol oxidizing enzyme, such as laccase and/or Stachybotrys phenol oxidase B, and/or variants thereof. The invention further provides polynucleotides encoding said carotenoid-binding peptide-phenol oxidizing enzyme fusion proteins, and use of said polynucleotides in transforming host cells for recombinant production of fusion proteins. Still further, the invention provides for the use of said recombinant fusion proteins in construction of a detergent, wherein said detergent can be used to clean a carotenoid stain on a fabric and/or a surface contacting the stain. Finally, the invention provides the amino acid sequences of Stachybotrys chartarum phenol oxidase B and carotenoid-binding peptides. In the examples, the invention demonstrated that a fusion protein composed of Seq ID number 16 carotenoid-binding peptide and a phenol oxidase B variant (M254F/E346V/E348Q) bound to tomato stain on cotton better than the enzyme alone.

ST fusion protein carotenoid binding peptide phenol oxidizing enzyme; sequence phenol oxidase B Stachybotrys use fusion protein; detergent stain remover carotenoid binding peptide phenol oxidizing enzyme; laccase carotenoid binding peptide fusion detergent stain remover

IT Detergents

(bleaching; fusion proteins composed of carotenoid-binding peptides and phenol oxidizing enzymes, and their use in construction of detergent for bleaching carotenoid stain on fabric or surface)

IT Fusion proteins (chimeric proteins)

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(carotenoid-binding peptide fused to phenol oxidizing enzyme; fusion proteins composed of carotenoid-binding peptides and phenol oxidizing enzymes, their polynucleotides and use in construction of detergent)

IT Peptides, properties

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or

engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(carotenoid-binding, fusion product with phenol oxidizing enzyme;
fusion proteins composed of carotenoid-binding peptides and phenol
oxidizing enzymes, and their use in construction of detergent)

IT Textiles

(cotton; fusion proteins composed of carotenoid-binding peptides and
phenol oxidizing enzymes, and their ability to better bind tomato
stains on cotton than enzymes alone)

IT Detergents

Surface

Textiles

(fusion proteins composed of carotenoid-binding peptides and phenol
oxidizing enzymes, and their use in construction of detergent for
bleaching carotenoid stain on fabric or surface)

IT Carotenes, processes

RL: REM (Removal or disposal); PROC (Process)

(fusion proteins composed of carotenoid-binding peptides and phenol
oxidizing enzymes, and their use in construction of detergent for
bleaching carotenoid stain on fabric or surface)

IT Polynucleotides

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(fusion proteins composed of carotenoid-binding peptides and phenol
oxidizing enzymes, their polynucleotides and use in construction of
detergent for bleaching carotenoid stain on fabric or surface)

IT Capsicum annuum annuum

(longum group, paprika; peptides able to bind carotenoid compds., their
ability to bind carotenoids found in tomato or paprika and use in
construction of fusion proteins with Stachybotrys phenol oxidizing
enzymes)

IT Plasmid vectors

(pGAPT; polynucleotides encoding fusion proteins composed of
carotenoid-binding peptides and phenol oxidizing enzymes, their vectors
and use in transforming host cells for recombinant protein production)

IT Lycopersicon esculentum

(peptides able to bind carotenoid compds., their ability to bind
carotenoids found in tomato or paprika and use in construction of
fusion proteins with Stachybotrys phenol oxidizing enzymes)

IT Repeat motifs (protein)

(peptides able to bind carotenoid compds., their protein motifs,
sequences and use in construction of fusion proteins with Stachybotrys
phenol oxidizing enzymes for creation of detergent)

IT Molecular cloning

(polynucleotides encoding fusion proteins composed of
carotenoid-binding peptides and phenol oxidizing enzymes, their vectors
and use in transforming host cells for recombinant protein production)

IT Stachybotrys chartarum

(sequence of phenol oxidase B found in Stachybotrys chartarum, and its
use in production of fusion proteins comprising carotenoid-binding
proteins)

IT Detergents

(stain removers; fusion proteins composed of carotenoid-binding
peptides and phenol oxidizing enzymes, and their use in construction of
detergent for bleaching carotenoid stain on fabric or surface)

IT Aspergillus niger

Escherichia coli

(transformed; polynucleotides encoding fusion proteins composed of
carotenoid-binding peptides and phenol oxidizing enzymes, their vectors
and use in transforming host cells for recombinant protein production)

IT 847966-56-7P

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or
engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(amino acid sequence; fusion proteins composed of carotenoid-binding
peptides and phenol oxidizing enzymes, and their ability to better bind

[illegible]

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enzyme 502166-97-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502166-98-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502166-99-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-00-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with Stachybotrys phenol oxidizing enzymes for creation of detergent)

IT 502167-01-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-02-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-03-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-04-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-05-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-06-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-07-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-08-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-09-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-10-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-11-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-12-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-13-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-14-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-15-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-16-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-17-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-18-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-19-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-20-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-21-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-22-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-23-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-24-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-25-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-26-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-27-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-29-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-30-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-31-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-32-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-33-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-34-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-35-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-36-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-37-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-38-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-39-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-40-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-41-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-42-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-43-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-44-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-45-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-46-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-47-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-48-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-49-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-50-2DP,

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derivs. and fusion product with phenol oxidizing enzyme 502168-68-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-69-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-70-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-71-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-72-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-73-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-74-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-75-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-76-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-77-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-78-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-79-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-80-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-81-2DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-82-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-83-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-84-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-85-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-88-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-90-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-91-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-92-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-93-6DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-94-7DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-95-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-96-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-97-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502168-98-1DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502169-01-9DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 847910-73-0DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 847910-77-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 847910-78-5DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 847910-84-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with *Stachybotrys* phenol oxidizing enzymes for creation of detergent)

IT 847966-55-6DP, fusion product with carotenoid-binding peptide

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; sequence of phenol oxidase B found in *Stachybotrys chartarum*, and its use in production of fusion proteins comprising carotenoid-binding proteins)

IT 9002-10-2DP, Phenol oxidase, fusion product with carotenoid-binding peptide

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(isoenzyme B; peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with *Stachybotrys* phenol oxidizing enzymes (such as phenol oxidase B) for creation of detergent)

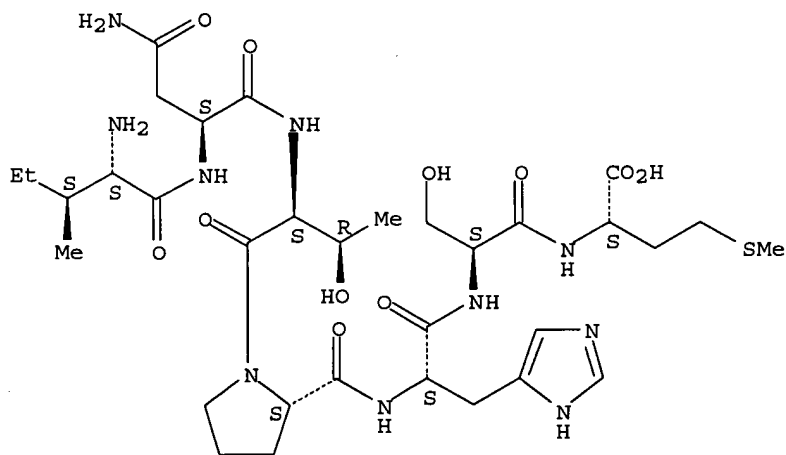
IT 80498-15-3DP, Laccase, fusion product with carotenoid-binding peptide

RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with *Stachybotrys* phenol oxidizing

- enzymes (such as laccase) for creation of detergent)
- IT 52-90-4DP, Cysteine, added to N-terminus or C-terminus of carotenoid-binding peptide
- RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with *Stachybotrys* phenol oxidizing enzymes for creation of detergent)
- IT 502697-64-5 502697-65-6 847967-48-0 847967-49-1 847967-50-4
847967-51-5 847967-52-6 847967-53-7 847967-54-8 847967-55-9
847967-56-0 847967-57-1 847967-58-2
- RL: PRP (Properties)
- (unclaimed sequence; fusion proteins composed of carotenoid-binding peptides and phenol oxidizing enzymes (phenol oxidase B or laccase), and their use in construction of detergent for bleaching carotenoid stain on fabric or surface)
- IT 502166-83-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-78-4DP, cysteine derivs. and fusion product with phenol oxidizing enzyme 502167-93-3DP, cysteine derivs. and fusion product with phenol oxidizing enzyme
- RL: BPN (Biosynthetic preparation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (amino acid sequence; peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with *Stachybotrys* phenol oxidizing enzymes for creation of detergent)
- RN 502166-83-8 HCAPLUS
- CN L-Methionine, L-isoleucyl-L-asparaginyl-L-threonyl-L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

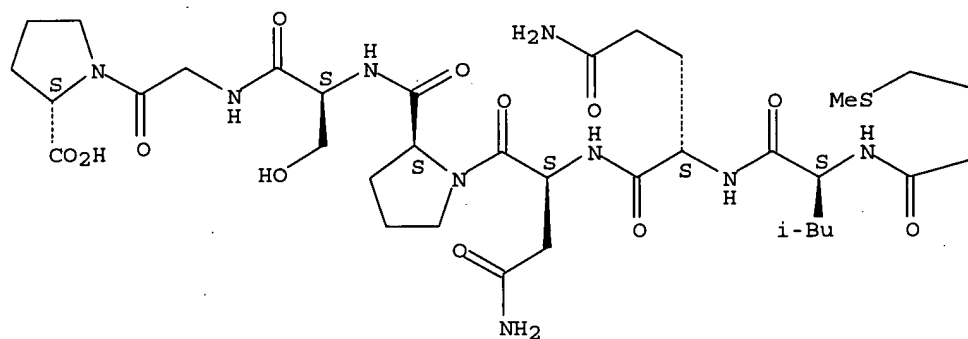
Absolute stereochemistry.



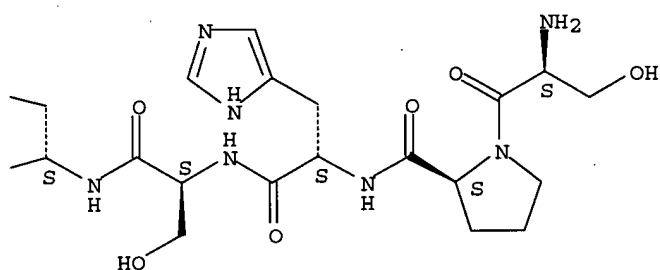
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- CN L-Proline, L-seryl-L-prolyl-L-histidyl-L-seryl-L-methionyl-L-leucyl-L-glutaminyl-L-asparaginyl-L-prolyl-L-serylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

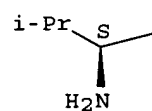
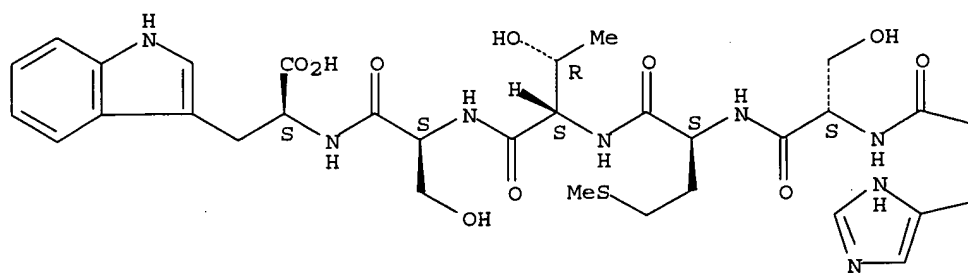


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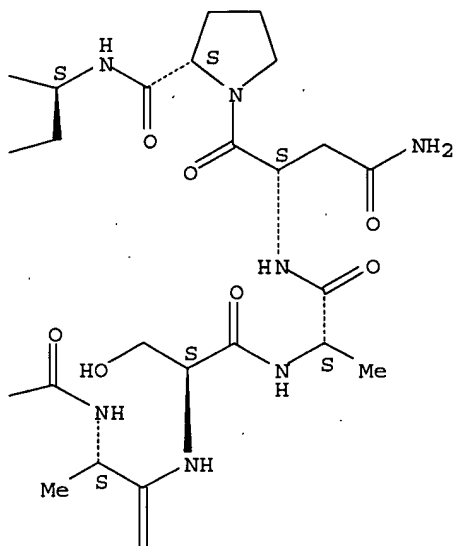
CN L-Tryptophan, L-valyl-L-alanyl-L-seryl-L-alanyl-L-asparaginyl-L-prolyl-L-histidyl-L-seryl-L-methionyl-L-threonyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-B



L24 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:634089 HCAPLUS

DN 141:167846

ED Entered STN: 06 Aug 2004

TI Binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders

IN Sato, Aaron K.; Sexton, Daniel J.; Dransfield, Daniel T.; Ladner, Robert C.; Arbogast, Christophe; Bussat, Philippe; Fan, Hong; Khurana, Sudha; Linder, Karen E.; Marinelli, Edmund R.; Nanjappan, Palaniappa; Nunn, Adrian; Pillai, Radhakrishna; Pochon, Sibylle; Ramalingam, Kondareddiar; Shrivastava, Ajay; Song, Bo; Swenson, Rolf E.; Von Wronski, Mathew A.

PA Dyax Corp., USA; Bracco International B.V.

SO PCT Int. Appl., 470 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12Q001-00

ICS A61K048-00

CC 1-12 (Pharmacology)

Section cross-reference(s): 9, 63

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004065621	A1	20040805	WO 2003-US28787	20030911 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,				

Search done by Noble Jarrell

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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 WO 2003074005 A2 20030912 WO 2003-US6731 20030303 <--
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 PRAI US 2002-360851P P 20020301 <--
 US 2003-440411P P 20030115
 US 2003-382082 A2 20030303
 WO 2003-US6731 A2 20030303

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004065621	ICM	C12Q001-00
	ICS	A61K048-00
WO 2004065621	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71
WO 2003074005	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71

OS MARPAT 141:167846

AB The present invention provides peptides, peptide dimers, and multimeric complexes comprising at least one binding moiety for KDR receptor or vascular endothelial growth factor (VEGF)/KDR complex, which have a variety of uses wherever treating, detecting, isolating, or localizing angiogenesis is advantageous. Particularly disclosed are synthetic, isolated peptides capable of binding KDR or VEGF/KDR complex with high affinity (e.g., having a $KD < 1 \mu M$), and dimer and multimeric constructs comprising these polypeptides. The involvement of VEGF and KDR in angiogenesis makes the binding peptides particularly useful for imaging important sites of angiogenesis, e.g., neoplastic tumors, for targeting substances, e.g., therapeutics, including radiotherapeutics, to such sites, and for treating certain disease states, including those associated with inappropriate angiogenesis.

ST KDR receptor VEGF binding peptide angiogenesis diagnosis therapy; vascular endothelial growth factor KDR receptor binding peptide; imaging KDR receptor VEGF binding peptide angiogenesis

IT Imaging agents
 (NMR contrast; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT Imaging agents
 (acoustic imaging contrast agents; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT Peptides, biological studies

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (amides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT Peptides, biological studies

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (analogs, peptoids; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis,

- therapy, and imaging of angiogenesis-related disorders)
- IT Angiogenesis inhibitors
 Anti-AIDS agents
 Antimalarials
 Antitumor agents
 Antiviral agents
 Chemotherapy
 Drug screening
 Human
 Neoplasm
 Phage display
 Radiopharmaceuticals
 Radiotherapy
 Scintigraphic agents
 (binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Avidins
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Glycopeptides
 Peptides, biological studies
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Chelating agents
 Cytotoxic agents
 Dyes
 Fluorescent substances
 Paramagnetic materials
 (conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Radionuclides, biological studies
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Enzymes, biological studies
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (conjugates, with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Peptides, biological studies
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (conjugates; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Imaging agents
 (contrast, radiog.; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Human immunodeficiency virus
 Malaria
 Simian hemorrhagic fever virus
 Simian immunodeficiency virus
 (detection of; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis,

- therapy, and imaging of angiogenesis-related disorders)
- IT Imaging
 - (diagnostic; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Peptides, biological studies
 - RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 - (disulfide-containing; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Escherichia coli
 - (enterohemorrhagic, detection of; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Gases
 - (fluorinated, conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Angiogenesis
 - (inhibition of; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Peptides, biological studies
 - RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 - (labeled; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Drug delivery systems
 - (liposomes, peptide-containing; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Bubbles
 - (microbubbles, phospholipid-stabilized, conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Diagnosis
 - (mol.; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Particles
 - (paramagnetic, conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Bacteriophage
 - (peptide display; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Liposomes
 - (peptide-containing; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Peptides, biological studies
 - RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 - (retro-inverso; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT Paramagnetic materials
 - (superparamagnetic, conjugates with peptides; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

disorders)

IT Drug delivery systems
Gene targeting
(to KDR-expressing cells; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT Vascular endothelial growth factor receptors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(type VEGFR-2; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT Perfluorocarbons
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(ultrasound contrast agent; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 612494-38-9
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 127464-60-2D, Vascular endothelial growth factor, KDR receptor complexes
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 58-85-5, Biotin 9013-20-1, Streptavidin 157885-16-0, Neutravidin
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 736140-24-2P 736140-25-3P 736140-27-5P 736140-29-7P 736140-30-0P
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736140-36-6P 736140-37-7P 736140-38-8P 736140-41-3P 736140-42-4P
736140-43-5P 736140-44-6P 736140-45-7P 736140-46-8P 736140-54-8P
736140-93-5P 736140-99-1P 736141-11-0P 736141-24-5P 736141-29-0P
736141-30-3P 736141-31-4P 736141-47-2P 736141-74-5P 736141-86-9P
736141-87-0P 736141-90-5P 736141-92-7P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

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RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

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735281-62-6	735281-63-7	735281-64-8	735281-65-9	735281-66-0
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735281-72-8	735281-73-9	735281-74-0	735281-75-1	735281-76-2
735281-77-3	735281-78-4	735281-79-5	735281-80-8	735281-81-9
735281-82-0	735281-83-1	735281-84-2	735281-85-3	735281-86-4
735281-87-5	735281-88-6	735281-89-7	735281-90-0	735281-91-1
735281-92-2	735281-93-3	735281-94-4	735281-95-5	735281-96-6
735281-97-7	735281-98-8	735281-99-9	735282-00-5	735282-01-6
735282-02-7				

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT	735282-03-8	735282-04-9	735282-05-0	735282-06-1	735282-07-2
	735282-08-3	735282-10-7	735282-11-8	735282-12-9	735282-13-0
	735282-14-1	735282-15-2	735282-16-3	735282-17-4	735282-18-5
	735282-19-6	735282-20-9	735282-21-0	735282-22-1	735282-23-2
	735282-24-3	735282-25-4	735282-26-5	735282-27-6	735282-28-7
	735282-29-8	735282-30-1	735282-31-2	735282-32-3	735282-33-4
	735282-34-5	735282-35-6	735282-36-7	735282-37-8	735282-38-9
	735282-39-0	735282-40-3	735282-41-4	735282-42-5	735282-43-6
	735282-44-7	735282-45-8	735282-46-9	735282-47-0	735282-48-1
	735282-49-2	735282-50-5	735282-51-6	735282-52-7	735282-53-8
	735282-54-9	735282-55-0	735282-56-1	735282-57-2	735282-58-3
	735282-59-4	735282-60-7	735282-61-8	735282-62-9	735282-70-9
	735282-72-1	735282-85-6	735282-88-9	735282-90-3	735282-92-5
	735282-94-7	735282-96-9	735282-98-1	735283-00-8	735283-02-0
	735283-06-4	736139-53-0	736139-54-1	736139-55-2	736139-68-7
	736139-72-3	736139-74-5	736139-75-6	736139-76-7	736139-78-9
	736139-79-0	736139-80-3	736139-84-7	736140-14-0	736140-18-4
	736140-23-1				

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT	189023-89-0	444812-91-3	612493-70-6	612494-16-3	735283-08-6
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RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(chelator; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT	51-92-3, Tetramethylammonium	60-00-4, EDTA, biological studies
	67-43-6, DTPA	112-24-3, TETA
	869-52-3, TTHA	1170-02-1
	4408-81-5, PDTA	35998-29-9, HBED
	56491-86-2, NOTA	60239-18-1, DOTA
	69146-59-4, MECAM	75956-68-2
	104162-48-3, DOTMA	114873-37-9, DO3A

RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chelator; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT	735845-12-2
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RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(consensus peptide sequence 10; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

- IT 735845-13-3
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 11; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-14-4
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 12; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-15-5
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 14; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-07-5
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 5; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-10-0
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 7; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-11-1
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (consensus peptide sequence 9; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-16-6
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (loop consensus peptide sequence 13; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-17-7
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (loop consensus peptide sequence 23; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-18-8
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (loop consensus peptide sequence 24; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 735845-19-9
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (loop consensus peptide sequence 25; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)
- IT 14701-22-5, Nickel-2+, biological studies 14913-52-1, Neodymium-3+, biological studies 15158-11-9, Copper-2+, biological studies

15438-31-0, Iron-2+, biological studies 16065-83-1, Chromium-3+, biological studies 16397-91-4, Manganese-2+, biological studies 16910-54-6, Europium-2+, biological studies 18472-30-5, Erbium-3+, biological studies 20074-52-6, Iron-3+, biological studies 22537-59-3, Protactinium-4+, biological studies 22541-14-6, Praseodymium-3+, biological studies 22541-17-9, Samarium-3+, biological studies 22541-18-0, Europium-3+, biological studies 22541-19-1, Gadolinium-3+, biological studies 22541-20-4, Terbium-3+, biological studies 22541-21-5, Dysprosium-3+, biological studies 22541-22-6, Holmium-3+, biological studies 22541-53-3, Cobalt-2+, biological studies 22541-63-5, Cobalt-3+, biological studies 22541-75-9, Titanium-3+, biological studies

RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(paramagnetic metal; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 10043-49-9, Gold-198, biological studies 10043-66-0, Iodine-131, biological studies 10098-91-6, Yttrium-90, biological studies 13967-64-1, Dysprosium-165, biological studies 13967-65-2, Holmium-166, biological studies 13967-74-3, Cerium-141, biological studies 13968-53-1, Ruthenium-103, biological studies 13981-25-4, Copper-64, biological studies 13981-28-7, Lanthanum-140, biological studies 13981-56-1, Fluorine-18, biological studies 13982-36-0, Yttrium-88, biological studies 14041-44-2, Ytterbium-175, biological studies 14119-09-6, Gallium-67, biological studies 14158-30-6, Iodine-124, biological studies 14158-31-7, Iodine-125, biological studies 14265-75-9, Lutetium-177, biological studies 14276-53-0, Copper-62, biological studies 14378-26-8, Rhenium-188, biological studies 14391-11-8, Gold-199, biological studies 14391-19-6, Terbium-161, biological studies 14391-22-1, Thulium-167, biological studies 14391-96-9, Scandium-47, biological studies 14392-02-0, Chromium-51, biological studies 14687-25-3, Lead-203, biological studies 14733-03-0, Bismuth-214, biological studies 14913-49-6, Bismuth-212, biological studies 14913-89-4, biological studies 14981-64-7, Palladium-109, biological studies 14998-63-1, Rhenium-186, biological studies 15229-37-5, Bismuth-211, biological studies 15715-08-9, Iodine-123, biological studies 15743-54-1, Ytterbium-168, biological studies 15750-15-9, Indium-111, biological studies 15757-14-9, Gallium-68, biological studies 15757-86-5, Copper-67, biological studies 15758-35-7, Ruthenium-97, biological studies 15765-31-8, Promethium-149, biological studies 15765-38-5, Bromine-76, biological studies 15765-39-6, Bromine-77, biological studies 15766-00-4, Samarium-153, biological studies 15776-20-2, Bismuth-213, biological studies 15840-01-4, Dysprosium-166, biological studies 378784-45-3, Technetium-99m, biological studies

RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(therapeutic radionuclide; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 75-71-8, Dichlorodifluoromethane 75-72-9, Chlorotrifluoromethane 75-73-0, Tetrafluoromethane 76-15-3 76-19-7, Octafluoropropane 353-59-3, Bromochlorodifluoromethane 355-25-9, Decafluorobutane

RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)

(ultrasound contrast agent; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 735863-58-8 735863-59-9 735863-60-2 735863-61-3 735863-62-4 735863-63-5 735863-64-6 735863-65-7 735863-66-8

RL: PRP (Properties)

(unclaimed nucleotide sequence; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

IT 210573-59-4 599210-02-3 599210-03-4 599210-04-5 735281-23-9 735281-24-0 735281-25-1 735863-67-9 735863-68-0

RL: PRP (Properties)

(unclaimed sequence; binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Hirth; US 5942385 A 1999 HCAPLUS

(2) Hu; US 6040157 A 2000 HCAPLUS

(3) Keyt; US 6057428 A 2000 HCAPLUS

(4) Ullrich; US 5851999 A 1998 HCAPLUS

IT 599210-01-2

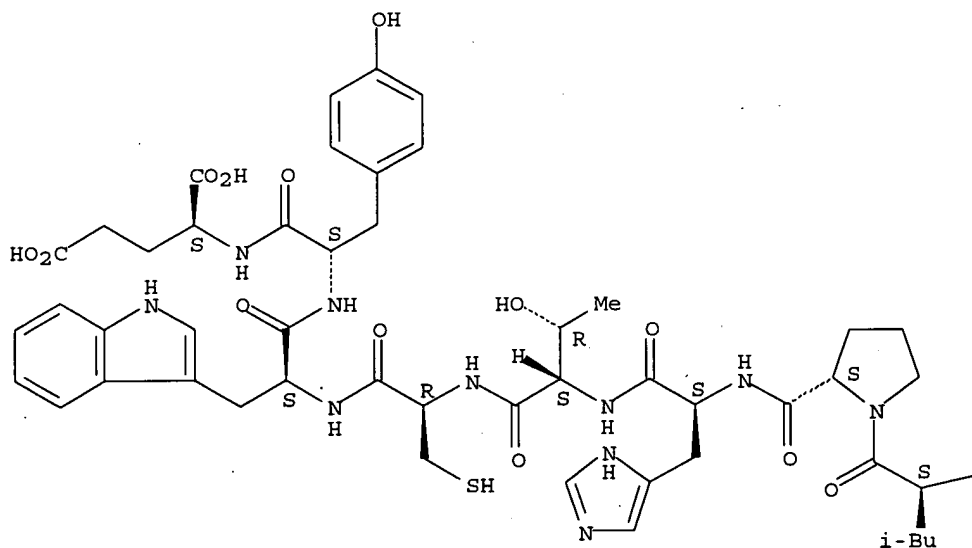
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding peptides for the KDR receptor and vascular endothelial growth factor/KDR complex and their use in diagnosis, therapy, and imaging of angiogenesis-related disorders)

RN 599210-01-2 HCAPLUS

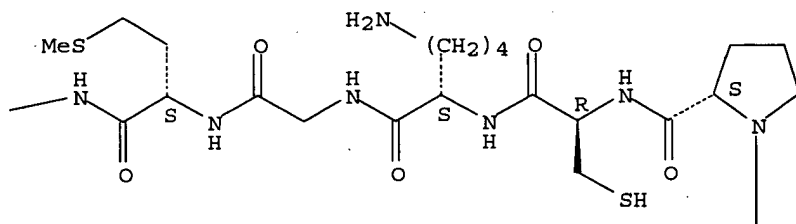
CN L-Glutamic acid, glycyl-L-histidyl-L-prolyl-L-cysteinyl-L-lysylglycyl-L-methionyl-L-leucyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyl-L-tryptophyl-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

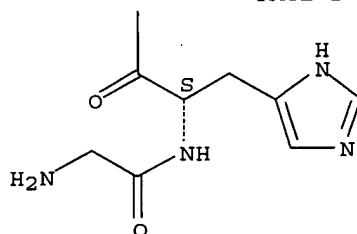
PAGE 1-A



PAGE 1-B



PAGE 2-B



L24 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:311016 HCAPLUS

DN 140:337904

ED Entered STN: 16 Apr 2004

TI Vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins

IN Sette, Alessandro; Chesnut, Robert; Newman, Mark J.; Livingston, Brian D.; Babe, Lilia Maria; Chen, Yiyu; Deyoung, Lawrence M.; Huang, Manley T. F.; Power, Scott D.

PA Epimmune Inc., USA; Genencor International, Inc.

SO PCT Int. Appl., 401 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K

CC 15-2 (Immunochemistry)

Section cross-reference(s): 3

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004031210	A2	20040415	WO 2003-US31303	20031003 <--
	WO 2004031210	A3	20040910		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

Search done by Noble Jarrell

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2500955 AA 20040415 CA 2003-2500955 20031003 <--
 PRAI US 2002-415463P P 20021003 <--
 US 2002-419973P P 20021022 <--
 WO 2003-US31303 W 20031003

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004031210	ICM	C07K
AB	The invention relates to multi-epitope nucleic acid and peptide vaccines and methods of designing such vaccines to provide increased immunogenicity. In particular, the chimeric constructs comprise cytotoxic T lymphocyte and helper T cell epitopes derived from hepatitis B virus pol, env and core proteins.	
ST	hepatitis B virus pol env core protein CTL epitope; cytotoxic T lymphocyte epitope HBV antigen hepatitis B vaccine; helper T cell epitope HBcAg pol env HBV vaccine	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA (human leukocyte-associated antigen); vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-A1; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-A24; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-A2; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-A3; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-B, HLA-B3; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)	
IT	Histocompatibility antigens RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HLA-D, HLA-DM; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env	

- and core proteins)
- IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (HLA-D, HLA-DO; vaccines comprising optimized multiple cytotoxic or
 helper T lymphocyte epitopes derived from hepatitis B virus pol, env
 and core proteins)
- IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (HLA-DR3; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (HLA-DR; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Genetic element
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (IRES (internal ribosomal entry site) element; vaccines comprising
 optimized multiple cytotoxic or helper T lymphocyte epitopes derived
 from hepatitis B virus pol, env and core proteins)
- IT Proteins
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (LAMP-1 (lysosome-associated membrane protein 1), lysosomal targeting
 sequence; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Proteins
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (LAMP-2 (lysosome-associated membrane protein 2), lysosomal targeting
 sequence; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (MHC (major histocompatibility complex), class I, targeting; vaccines
 comprising optimized multiple cytotoxic or helper T lymphocyte epitopes
 derived from hepatitis B virus pol, env and core proteins)
- IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (MHC (major histocompatibility complex), class II, targeting; vaccines
 comprising optimized multiple cytotoxic or helper T lymphocyte epitopes
 derived from hepatitis B virus pol, env and core proteins)
- IT Proteins
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (Ty; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Prostate gland, neoplasm
 (antigen; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Biology
 (cell; vaccines comprising optimized multiple cytotoxic or helper T
 lymphocyte epitopes derived from hepatitis B virus pol, env and core
 proteins)
- IT Protein motifs

- (cytoplasmic domain; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT T cell (lymphocyte)
 - (cytotoxic; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT T cell (lymphocyte)
 - (helper cell; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Antigens
 - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (hepatitis B core; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Antigens
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (hepatitis B surface; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Vaccines
 - (hepatitis B; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Vaccines
 - (influenza; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Influenza
 - (matrix protein; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Proteins
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (matrix, influenza; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Polyproteins
 - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (pol; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Cytomegalovirus
 - (promoter; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Genetic element
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (regulatory; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Genetic element
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (signal sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)
- IT Lysosome

(targeting sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT DNA
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (vaccine; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT DNA sequences
 Endoplasmic reticulum
 Epitopes
 Gene therapy
 Genetic vectors
 Hepatitis B virus
 Hepatitis C virus
 Human
 Human immunodeficiency virus
 Immunotherapy
 Molecular cloning
 Protein sequences
 Yeast
 (vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT Envelope proteins
 Fusion proteins (chimeric proteins)
 Nucleic acids
 Polynucleotides
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT Invariant chain (class II antigen)
 Promoter (genetic element)
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT Antibodies and Immunoglobulins
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (κ; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 679448-45-4P 679448-46-5P 679448-51-2P 679448-52-3P 679448-53-4P
 679448-54-5P 679448-84-1P 679448-85-2P 679448-86-3P 679448-87-4P
 679448-88-5P 679448-89-6P 679448-90-9P 679448-91-0P 679448-92-1P
 679448-93-2P 679448-94-3P 679448-95-4P 679448-96-5P 679448-97-6P
 679448-98-7P 679448-99-8P 679449-00-4P 679449-01-5P 679449-02-6P
 679449-03-7P 679449-04-8P 679449-05-9P 679449-06-0P 679449-07-1P
 679449-08-2P 679449-09-3P 679449-10-6P 679449-11-7P 679449-12-8P
 679449-20-8P 679449-21-9P 679449-22-0P 679449-23-1P 679449-24-2P
 679449-25-3P 679449-26-4P
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (amino acid sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 679448-43-2P 679448-44-3P 679448-47-6P 679448-48-7P 679448-49-8P
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679448-59-0P 679448-60-3P 679448-61-4P 679448-62-5P 679448-63-6P
 679448-64-7P 679448-65-8P 679448-66-9P 679448-67-0P 679448-68-1P
 679448-69-2P 679448-70-5P 679448-71-6P 679448-72-7P 679448-73-8P
 679448-74-9P 679448-75-0P 679448-76-1P 679448-77-2P 679448-78-3P
 679448-79-4P 679448-80-7P 679448-81-8P 679448-82-9P 679448-83-0P
 679449-13-9P 679449-14-0P 679449-15-1P 679449-16-2P 679449-17-3P
 679449-18-4P 679449-19-5P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(nucleotide sequence; vaccines comprising optimized multiple cytotoxic
 or helper T lymphocyte epitopes derived from hepatitis B virus pol, env
 and core proteins)

IT 9004-10-8, Insulin, biological studies 139639-23-9, Tissue plasminogen
 activator

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(signal sequence; vaccines comprising optimized multiple cytotoxic or
 helper T lymphocyte epitopes derived from hepatitis B virus pol, env
 and core proteins)

IT 54054-76-1 91234-78-5 115815-55-9 124397-71-3 126947-90-8
 129633-71-2 136671-81-3 139079-41-7 148335-25-5 151423-70-0
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 160214-68-6 160215-59-8 160215-60-1 162016-26-4 162558-00-1
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RL: PRP (Properties)

(unclaimed sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 679393-13-6 679393-14-7 679393-15-8 679393-16-9 679393-17-0
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 679393-70-5 679393-71-6 679393-72-7 679393-73-8 679393-74-9
 679393-75-0 679393-76-1 679393-77-2 679393-78-3 679393-81-8
 679394-52-6 679394-55-9

RL: PRP (Properties)

(unclaimed sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 82953-46-6P 140936-91-0P 147318-53-4P 147820-47-1P 147820-49-3P
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 679393-55-6P 679394-58-2P 679443-27-7P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 194039-57-1, PADRE

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

IT 679393-74-9

RL: PRP (Properties)

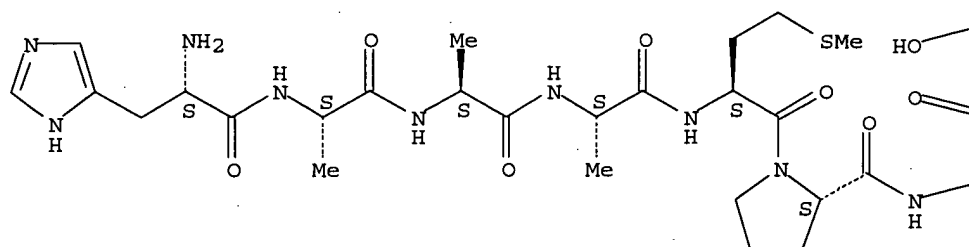
(unclaimed sequence; vaccines comprising optimized multiple cytotoxic or helper T lymphocyte epitopes derived from hepatitis B virus pol, env and core proteins)

RN 679393-74-9 HCAPLUS

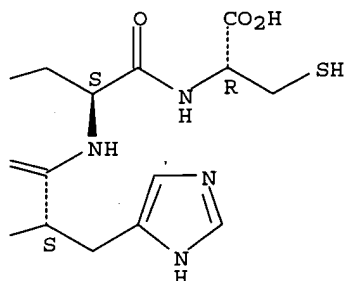
CN L-Cysteine, L-histidyl-L-alanyl-L-alanyl-L-alanyl-L-methionyl-L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:101303 HCAPLUS
 DN 140:180120
 ED Entered STN: 08 Feb 2004
 TI Alternative reading frame (ncORF) antigenic determinants from viruses and
 uses in vaccines
 IN Mattner, Frank; Schmidt, Walter; Habel, Andre
 PA Intercell A.-G., Austria
 SO PCT Int. Appl., 220 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C12N015-33
 ICS C07K014-005; C07K014-18; A61K039-12
 CC 15-2 (Immunochimistry)
 Section cross-reference(s): 3, 10
 FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004011650	A2	20040205	WO 2003-EP8112	20030724 <--
	WO 2004011650	A3	20040624		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

Search done by Noble Jarrell

CA 2484941 AA 20040205 CA 2003-2484941 20030724 <--
 WO 2004011650 A2 20040205 WO 2003-XA8112 20030724 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

EP 1523557 A2 20050420 EP 2003-771083 20030724 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRAI AT 2002-1124 A 20020724 <--
 EP 2003-450171 A 20030711
 WO 2003-EP8112 W 20030724

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004011650	ICM	C12N015-33
	ICS	C07K014-005; C07K014-18; A61K039-12
WO 2004011650	ECLA	A61K039/12; A61K039/145; A61K039/29B; C07K014/005; C07K014/11; C07K014/18F4

AB It is an object of the present invention to provide means for replacing or improving existing or proposed vaccines against viral pathogens, especially human pathogens. A specific aim is to provide effective T cell epitopes against viral pathogens. The invention discloses polypeptides encoded by an alternative reading frame (non-coding open-reading frame (ncORF)) of a pathogenic virus, which polypeptides - start with a methionine amino acid residue, - comprise an antigenic determinant (epitope) and - comprise more than 7 amino acid residues and fragments of said polypeptides comprising more than 7 amino acids. T cell responses against alternatively encoded epitopes are detectable in patients suffering such infections. Such a polypeptide according to the present invention may be defined as an antigenic sequence outside the primarily (main) transcribed ORF of a given pathogenic virus. Alternatively encoded antigens from hepatitis C virus and human immunodeficiency virus are provided. Possible ncORF epitopes with superior immunization properties were identified for hepatitis C virus (HCV), human immunodeficiency virus (HIV) and human papilloma virus (HPV). The immunogenicity of HCV ncORF peptides was demonstrated on HLA-A-allele-transgenic mice and on HCV patient -derived cells.

ST alternative reading frame antigen virus vaccine; vaccine HCV HIV HPV virus epitope ncORF alternative

IT Epitopes
 (CTL-; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Gene, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA, allele, CTL-epitope for; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Gene, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-A, alleles A0201, A1, A24, A3, A31, CTL-epitope for; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Gene, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-B, alleles B3501, B4403, B7, B8, CTL-epitope for; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-DP, alleles, CTL-epitopes for; alternative reading frame (ncORF))

antigenic determinants from viruses and uses in vaccines)

IT Gene, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-DQ, alleles, CTL-epitope for; alternative reading frame (ncORF)
 antigenic determinants from viruses and uses in vaccines)

IT Gene, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-DR, alleles, CTL-epitopes for; alternative reading frame (ncORF)
 antigenic determinants from viruses and uses in vaccines)

IT Antigens
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)
 (T cell; alternative reading frame (ncORF) antigenic determinants from
 viruses and uses in vaccines)

IT Antiviral agents
 Cytomegalovirus
 Ebola virus
 Feline immunodeficiency virus
 Foot-and-mouth disease virus
 Hepatitis A virus
 Hepatitis B virus
 Hepatitis C virus
 Hepatitis E virus
 Hepatitis F virus
 Hepatitis GB virus C/G
 Hepatitis delta virus
 Human
 Human T-lymphotropic virus 1
 Human T-lymphotropic virus 2
 Human adenovirus
 Human herpesvirus
 Human herpesvirus 3
 Human herpesvirus 4
 Human immunodeficiency virus
 Human immunodeficiency virus 1
 Human papillomavirus
 Immunomodulators
 Influenza virus
 Measles virus
 Papillomavirus
 Parvovirus
 Rotavirus
 Simian immunodeficiency virus
 (alternative reading frame (ncORF) antigenic determinants from viruses
 and uses in vaccines)

IT Vaccines
 (antiviral; alternative reading frame (ncORF) antigenic determinants
 from viruses and uses in vaccines)

IT Drug delivery systems
 (carriers; alternative reading frame (ncORF) antigenic determinants
 from viruses and uses in vaccines)

IT Immunostimulants
 (co-application with; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT Anti-inflammatory agents
 Antimicrobial agents
 (co-application; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT Viremia
 (controlling; alternative reading frame (ncORF) antigenic determinants
 from viruses and uses in vaccines)

IT T cell (lymphocyte)
 (cytotoxic, CTL, epitope; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT Oligodeoxyribonucleotides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(deoxyinosine- and/or deoxyuridine-containing, immunomodulating, conjugated to ncORF epitope; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT T cell (lymphocyte)
(helper cell, epitope; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunopotentiating, co-application; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Protein sequences
(of alternatively encoded antigens from hepatitis C virus and human immunodeficiency virus; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Animal virus
(oncogenic; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Gene
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(open reading frame, alternative, for complementary strand, non-coding open-reading frame (ncORF); alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Virus
(pathogenic; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polycationic, immunomodulating, conjugated to ncORF epitope; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT Peptides, biological studies
Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polycationic, immunostimulatory; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT 9002-72-6, Growth hormone 170006-50-5, Cathelicidin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(-derived peptide, immunostimulatory; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT 25212-18-4, L-Arginine, homopolymer
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(1; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT 133504-77-5 133526-55-3 133941-02-3 475386-42-6 475386-49-3
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657076-73-8	657076-74-9	657076-75-0	657076-76-1	657076-77-2
657076-78-3	657076-79-4	657076-80-7	657076-81-8	657076-82-9
657076-83-0	657076-84-1	657076-85-2	657076-86-3	657076-87-4
657076-88-5	657076-89-6	657076-90-9	657076-91-0	657076-92-1
657076-93-2	657076-94-3	657076-95-4	657076-96-5	657076-97-6
657076-98-7	657076-99-8	657077-00-4	657077-01-5	657077-02-6
657077-03-7	657077-04-8	657077-05-9	657077-06-0	657077-07-1
657077-08-2	657077-09-3	657077-10-6	657077-11-7	657077-12-8
657077-13-9	657077-14-0	657077-15-1	657077-16-2	657077-17-3
657077-18-4	657077-19-5	657077-20-8	657077-21-9	657077-22-0
657077-23-1	657077-24-2	657077-25-3	657077-26-4	657077-27-5
657077-28-6	657077-29-7	657077-30-0	657077-31-1	657077-32-2
657077-33-3	657077-34-4	657077-35-5	657077-36-6	657077-37-7
657077-38-8	657077-39-9	657077-40-2	657077-41-3	657077-42-4
657077-43-5	657077-44-6	657077-45-7	657077-46-8	657077-47-9
657077-48-0	657077-49-1	657077-50-4	657077-51-5	657077-52-6
657077-53-7	657077-54-8	657077-55-9	657077-56-0	657077-57-1
657077-58-2	657077-59-3	657077-60-6	657077-61-7	657077-62-8
657077-63-9	657077-64-0	657077-65-1	657077-66-2	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT 657077-67-3	657077-68-4	657077-69-5	657077-70-8	657077-71-9
657077-72-0	657077-73-1	657077-74-2	657077-75-3	657077-76-4
657077-77-5	657077-78-6	657077-79-7	657077-80-0	657077-81-1
657077-82-2	657077-83-3	657077-84-4	657077-85-5	657077-86-6
657077-87-7	657077-88-8	657077-89-9	657077-90-2	657077-91-3
657077-92-4	657077-93-5	657077-94-6	657077-95-7	657077-96-8
657077-97-9	657077-98-0	657077-99-1	657078-00-7	657078-01-8
657078-02-9	657078-03-0	657078-04-1	657078-05-2	657078-06-3
657078-07-4	657078-08-5	657078-09-6	657078-10-9	657078-11-0
657078-12-1	657078-13-2	657078-14-3	657078-15-4	657078-16-5
657078-17-6	657078-18-7	657078-19-8	657078-20-1	657078-21-2
657078-22-3	657078-23-4	657078-24-5	657078-25-6	657078-26-7
657078-27-8	657078-28-9	657078-29-0	657078-30-3	657078-31-4
657078-32-5	657078-33-6	657078-34-7	657078-35-8	657078-36-9
657078-37-0	657078-38-1	657078-39-2	657078-40-5	657078-41-6
657078-42-7	657078-43-8	657078-44-9	657078-45-0	657078-46-1
657078-47-2	657078-48-3	657078-49-4	657078-50-7	657078-51-8
657078-52-9	657078-53-0	657078-54-1	657078-55-2	657078-56-3
657078-57-4	657078-58-5	657078-59-6	657078-60-9	657078-61-0
657078-62-1	657078-63-2	657078-64-3	657078-65-4	657078-66-5
657351-15-0	657351-16-1	657351-17-2	657351-18-3	657351-19-4
657351-20-7	657351-21-8	657351-22-9	657351-23-0	657351-24-1
657351-25-2	657351-26-3	657351-27-4	657351-28-5	657351-29-6
657351-30-9	657351-31-0	657351-32-1	657351-33-2	657351-34-3
657351-35-4	657351-36-5	657351-37-6	657351-38-7	657351-39-8
657351-40-1	657351-41-2	657351-42-3	657351-44-5	657351-46-7
657351-48-9	657351-50-3	657351-52-5	657351-54-7	657351-56-9
657351-58-1	657351-60-5	657351-62-7	657351-64-9	657351-66-1
657351-67-2	657351-68-3	657351-69-4	657351-70-7	657351-71-8
657351-72-9	657351-73-0	657351-74-1	657351-75-2	657351-76-3
657351-77-4	657351-78-5	657351-79-6	657351-80-9	657351-81-0
657351-82-1	657351-83-2	657351-84-3	657351-85-4	657351-86-5
657351-87-6	657351-88-7	657351-89-8	657351-90-1	657351-91-2
657351-92-3	657351-93-4	657351-94-5	657351-95-6	657351-96-7
657351-97-8	657351-98-9	657351-99-0	657352-00-6	657352-01-7
657352-02-8	657352-03-9	657352-04-0	657352-05-1	657352-06-2

657352-07-3	657352-08-4	657352-09-5	657352-10-8	657352-11-9
657352-12-0	657352-13-1	657352-14-2	657352-15-3	657352-16-4
657352-17-5	657352-18-6	657352-19-7	657352-20-0	657352-21-1
657352-22-2	657352-23-3	657352-24-4	657352-25-5	657352-26-6
657352-27-7	657352-28-8	657352-29-9	657352-30-2	657352-31-3
657352-32-4	657352-33-5	657352-34-6	657352-35-7	657352-36-8
657352-37-9	657352-38-0	657352-39-1	657352-40-4	657352-41-5
657352-42-6	657352-43-7	657352-44-8	657352-45-9	657352-46-0
657352-47-1	657352-48-2	657352-49-3	657352-50-6	657352-51-7
657352-52-8	657352-53-9	657352-54-0	657352-55-1	657352-56-2
657352-57-3	657352-58-4	657352-59-5	657352-60-8	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657352-61-9	657352-62-0	657352-63-1	657352-65-3	657352-66-4
	657352-67-5	657352-68-6	657352-69-7	657352-70-0	657352-71-1
	657352-72-2	657352-73-3	657352-74-4	657352-75-5	657352-76-6
	657352-77-7	657352-78-8	657352-79-9	657352-80-2	657352-81-3
	657352-82-4	657352-83-5	657352-84-6	657352-85-7	657352-86-8
	657352-87-9	657352-88-0	657352-89-1	657352-90-4	657352-91-5
	657352-92-6	657352-93-7	657352-94-8	657352-95-9	657352-96-0
	657352-97-1	657352-98-2	657352-99-3	657353-00-9	657353-01-0
	657353-02-1	657353-03-2	657353-04-3	657353-05-4	657353-06-5
	657353-07-6	657353-08-7	657353-09-8	657353-10-1	657353-11-2
	657353-12-3	657353-13-4	657353-14-5	657353-15-6	657353-16-7
	657353-17-8	657353-18-9	657353-19-0	657353-20-3	657353-21-4
	657353-22-5	657353-23-6	657353-24-7	657353-25-8	657353-26-9
	657353-27-0	657353-28-1	657353-29-2	657353-30-5	657353-31-6
	657353-32-7	657353-33-8	657353-34-9	657353-35-0	657353-36-1
	657353-37-2	657353-38-3	657353-39-4	657353-40-7	657353-41-8
	657353-42-9	657353-43-0	657353-44-1	657353-45-2	657353-46-3
	657353-47-4	657353-48-5	657353-49-6	657353-50-9	657353-51-0
	657353-52-1	657353-53-2	657353-54-3	657353-55-4	657353-56-5
	657353-57-6	657353-58-7	657353-59-8	657353-60-1	657353-61-2
	657353-62-3	657353-63-4	657353-64-5	657353-65-6	657353-66-7
	657353-67-8	657353-68-9	657353-69-0	657353-70-3	657353-71-4
	657353-72-5	657353-73-6	657353-74-7	657353-75-8	657353-76-9
	657353-77-0	657353-78-1	657353-79-2	657353-80-5	657353-81-6
	657353-82-7	657353-83-8	657353-84-9	657353-85-0	657353-86-1
	657353-87-2	657353-88-3	657353-89-4	657353-90-7	657353-91-8
	657353-92-9	657353-93-0	657353-94-1	657353-95-2	657353-96-3
	657353-97-4	657353-98-5	657353-99-6	657354-00-2	657354-01-3
	657354-02-4	657354-03-5	657354-04-6	657354-05-7	657354-06-8
	657354-07-9	657354-08-0	657354-09-1	657354-10-4	657354-11-5
	657354-12-6	657354-13-7	657354-14-8	657354-15-9	657354-16-0
	657354-17-1	657354-18-2	657354-19-3	657354-20-6	657354-21-7
	657354-22-8	657354-23-9	657354-24-0	657354-25-1	657354-26-2
	657354-27-3	657354-28-4	657354-29-5	657354-30-8	657354-31-9
	657354-32-0	657354-33-1	657354-34-2	657354-35-3	657354-36-4
	657354-37-5	657354-38-6	657354-39-7	657354-40-0	657354-41-1
	657354-42-2	657354-43-3	657354-44-4	657354-45-5	657354-46-6
	657354-47-7	657354-48-8	657354-49-9	657354-50-2	657354-51-3
	657354-52-4	657354-53-5	657354-54-6	657354-55-7	657354-56-8
	657354-57-9	657354-58-0	657354-59-1	657354-60-4	657354-61-5
	657354-62-6	657354-63-7	657354-64-8	657354-65-9	657354-66-0
	657354-67-1	657354-68-2	657354-69-3	657354-70-6	657354-71-7
	657354-72-8	657354-73-9	657354-74-0	657354-75-1	657354-76-2
	657354-77-3	657354-78-4	657354-79-5	657354-80-8	657354-81-9
	657354-82-0	657354-83-1	657354-84-2	657354-85-3	657354-86-4
	657354-87-5	657354-88-6	657354-89-7	657354-90-0	657354-91-1
	657354-92-2	657354-93-3	657354-94-4	657354-95-5	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT	657354-96-6	657354-97-7	657354-98-8	657354-99-9	657355-00-5
	657355-01-6	657355-02-7	657355-03-8	657355-04-9	657355-05-0
	657355-06-1	657355-07-2	657355-08-3	657355-09-4	657355-10-7
	657355-11-8	657355-12-9	657355-13-0	657355-14-1	657355-15-2
	657355-17-4	657355-19-6	657355-21-0	657355-22-1	657355-23-2
	657355-24-3	657355-25-4	657355-26-5	657355-27-6	657355-28-7
	657355-29-8	657355-30-1	657355-31-2	657355-32-3	657355-33-4
	657355-34-5	657355-35-6	657355-36-7	657355-37-8	657355-38-9
	657355-39-0	657355-40-3	657355-41-4	657355-42-5	657355-43-6
	657355-44-7	657355-45-8	657355-46-9	657355-47-0	657355-48-1
	657355-49-2	657355-50-5	657355-51-6	657355-52-7	657355-53-8
	657355-54-9	657355-55-0	657355-56-1	657355-57-2	657355-58-3
	657355-59-4	657355-60-7	657355-61-8	657355-62-9	657355-63-0
	657355-64-1	657355-65-2	657355-66-3	657355-67-4	657355-68-5
	657355-69-6	657355-70-9	657355-71-0	657355-72-1	657355-73-2
	657355-74-3	657355-75-4	657355-76-5	657355-77-6	657355-78-7
	657355-79-8	657355-80-1	657355-81-2	657355-82-3	657355-83-4
	657355-84-5	657355-85-6	657355-86-7	657355-87-8	657355-88-9
	657355-89-0	657355-90-3	657355-91-4	657355-92-5	657355-93-6
	657355-94-7	657355-95-8	657355-96-9	657355-97-0	657355-98-1
	657356-00-8	657356-01-9	657356-02-0	657356-03-1	657356-04-2
	657356-05-3	657356-06-4	657356-07-5	657356-08-6	657356-09-7
	657356-10-0	657356-11-1	657356-12-2	657356-13-3	657356-14-4
	657356-15-5	657356-16-6	657356-17-7	657356-18-8	657356-19-9
	657356-20-2	657356-21-3	657356-22-4	657356-23-5	657356-24-6
	657356-25-7	657356-26-8	657356-27-9	657356-28-0	657356-29-1
	657356-30-4	657356-31-5	657356-32-6	657356-33-7	657356-34-8
	657356-35-9	657356-36-0	657356-37-1	657356-38-2	657356-39-3
	657356-40-6	657356-41-7	657356-42-8	657356-43-9	657356-44-0
	657356-45-1	657356-46-2	657356-47-3	657356-48-4	657356-49-5
	657356-50-8	657356-51-9	657356-52-0	657356-53-1	657356-54-2
	657356-55-3	657356-56-4	657356-57-5	657356-58-6	657356-59-7
	657356-60-0	657356-61-1	657356-62-2	657356-63-3	657356-64-4
	657356-65-5	657356-66-6	657356-67-7	657356-68-8	657356-69-9
	657356-70-2	657356-71-3	657356-72-4	657356-73-5	657356-74-6
	657356-75-7	657356-76-8	657356-77-9	657356-78-0	657356-79-1
	657356-80-4	657356-81-5	657356-82-6	657356-83-7	657356-84-8
	657356-85-9	657356-86-0	657356-87-1	657356-88-2	657356-89-3
	657356-90-6	657356-91-7	657356-92-8	657356-93-9	657356-94-0
	657356-95-1	657356-96-2	657356-97-3	657356-98-4	657356-99-5
	657357-00-1	657357-01-2	657357-02-3	657357-03-4	657357-04-5
	657357-05-6	657357-06-7	657357-07-8	657357-08-9	657357-09-0
	657357-10-3	657357-11-4	657357-12-5	657357-13-6	657357-14-7
	657357-15-8	657357-16-9	657357-17-0	657357-18-1	657357-19-2
	657357-20-5	657357-21-6	657357-22-7	657357-23-8	657357-24-9
	657357-25-0	657357-26-1	657357-27-2	657357-28-3	657357-29-4
	657357-30-7	657357-31-8	657357-32-9	657357-33-0	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)

IT	657357-34-1	657357-35-2	657357-36-3	657357-37-4	657357-38-5
	657357-39-6	657357-40-9	657357-42-1	657357-44-3	657357-46-5
	657357-48-7	657357-50-1	657357-53-4	657357-56-7	657357-58-9
	657357-59-0	657357-60-3	657357-61-4	657357-62-5	657357-63-6
	657357-64-7	657357-65-8	657357-66-9	657357-67-0	657357-68-1
	657357-69-2	657357-70-5	657357-71-6	657357-72-7	657357-73-8
	657357-74-9	657357-75-0	657357-76-1	657357-77-2	657357-78-3
	657357-79-4	657357-80-7	657357-81-8	657357-82-9	657357-83-0
	657357-84-1	657357-85-2	657357-86-3	657357-87-4	657357-88-5
	657357-89-6	657357-90-9	657357-91-0	657357-92-1	657357-93-2
	657357-94-3	657357-95-4	657357-96-5	657357-97-6	657357-98-7
	657357-99-8	657358-00-4	657358-01-5	657358-02-6	657358-03-7

657358-04-8	657358-05-9	657358-06-0	657358-07-1	657358-09-3
657358-10-6	657358-11-7	657358-12-8	657358-13-9	657358-14-0
657358-15-1	657358-16-2	657358-17-3	657358-18-4	657358-19-5
657358-20-8	657358-21-9	657358-22-0	657358-23-1	657358-24-2
657358-25-3	657358-26-4	657358-27-5	657358-28-6	657358-29-7
657358-30-0	657358-31-1	657358-32-2	657358-33-3	657358-34-4
657358-35-5	657358-36-6	657358-37-7	657358-38-8	657358-39-9
657358-40-2	657358-41-3	657358-42-4	657358-43-5	657358-44-6
657358-46-8	657358-47-9	657358-48-0	657358-49-1	657358-50-4
657358-51-5	657358-52-6	657358-53-7	657358-54-8	657358-55-9
657358-56-0	657358-57-1	657358-58-2	657358-59-3	657358-60-6
657358-61-7	657358-62-8	657358-63-9	657358-64-0	657358-65-1
657358-66-2	657358-67-3	657358-68-4	657358-69-5	657358-70-8
657358-71-9	657358-72-0	657358-73-1	657358-74-2	657358-75-3
657358-76-4	657358-77-5	657358-78-6	657358-79-7	657358-80-0
657358-81-1	657358-82-2	657358-83-3	657358-84-4	657358-85-5
657358-86-6	657358-87-7	657358-88-8	657358-89-9	657358-90-2
657358-91-3	657358-92-4	657358-93-5	657358-94-6	657358-95-7
657358-96-8	657358-97-9	657358-98-0	657358-99-1	657359-00-7
657359-01-8	657359-02-9	657359-03-0	657359-04-1	657359-05-2
657359-06-3	657359-07-4	657359-08-5	657359-09-6	657359-10-9
657359-11-0	657359-12-1	657359-13-2	657359-14-3	657359-15-4
657359-16-5	657359-17-6	657359-18-7	657359-19-8	657359-20-1
657359-21-2	657359-22-3	657359-23-4	657359-24-5	657359-25-6
657359-26-7	657359-27-8	657359-28-9	657359-29-0	657359-30-3
657359-31-4	657359-32-5	657359-33-6	657359-34-7	657359-35-8
657359-36-9	657359-37-0	657359-38-1	657359-39-2	657359-40-5
657359-41-6	657359-42-7	657359-43-8	657359-44-9	657359-45-0
657359-46-1	657359-47-2	657359-48-3	657359-49-4	657359-50-7
657359-51-8	657359-52-9	657359-53-0	657359-54-1	657359-55-2
657359-56-3	657359-57-4	657359-58-5	657359-59-6	657359-60-9
657359-61-0	657359-62-1	657359-63-2	657359-64-3	657359-65-4
657359-66-5	657359-67-6	657359-68-7	657359-69-8	657359-70-1
657359-71-2	657359-72-3	657359-73-4	657359-74-5	657359-75-6
657359-76-7	657359-77-8	657359-78-9	657359-79-0	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657359-80-3	657359-81-4	657359-82-5	657359-83-6	657359-84-7
	657359-85-8	657359-86-9	657359-87-0	657359-88-1	657359-89-2
	657359-90-5	657359-91-6	657359-92-7	657359-93-8	657359-94-9
	657359-95-0	657359-96-1	657359-97-2	657359-98-3	657359-99-4
	657360-00-4	657360-01-5	657360-02-6	657360-03-7	657360-04-8
	657360-05-9	657360-06-0	657360-07-1	657360-08-2	657360-09-3
	657360-10-6	657360-11-7	657360-12-8	657360-13-9	657360-14-0
	657360-15-1	657360-16-2	657360-17-3	657360-18-4	657360-19-5
	657360-20-8	657360-21-9	657360-22-0	657360-23-1	657360-24-2
	657360-25-3	657360-26-4	657360-27-5	657360-29-7	657360-30-0
	657360-32-2	657360-33-3	657360-34-4	657360-35-5	657360-36-6
	657360-37-7	657360-38-8	657360-39-9	657360-40-2	657360-41-3
	657360-42-4	657360-43-5	657360-44-6	657360-45-7	657360-46-8
	657360-48-0	657360-49-1	657360-50-4	657360-51-5	657360-52-6
	657360-53-7	657360-54-8	657360-55-9	657360-56-0	657360-57-1
	657360-58-2	657360-59-3	657360-60-6	657360-61-7	657360-62-8
	657360-67-3	657360-70-8	657360-73-1	657360-78-6	657360-79-7
	657360-80-0	657360-81-1	657360-82-2	657360-83-3	657360-84-4
	657360-85-5	657360-86-6	657360-87-7	657360-88-8	657360-89-9
	657360-90-2	657360-91-3	657360-92-4	657360-93-5	657360-94-6
	657360-95-7	657360-96-8	657360-97-9	657360-98-0	657360-99-1
	657361-00-7	657361-01-8	657361-02-9	657361-03-0	657361-04-1
	657361-05-2	657361-06-3	657361-07-4	657361-08-5	657361-09-6
	657361-10-9	657361-11-0	657361-12-1	657361-13-2	657361-14-3
	657361-15-4	657361-16-5	657361-17-6	657361-18-7	657361-19-8
	657361-20-1	657361-21-2	657361-22-3	657361-23-4	657361-24-5

657361-25-6	657361-26-7	657361-28-9	657361-29-0	657361-30-3
657361-31-4	657361-32-5	657361-33-6	657361-34-7	657361-35-8
657361-36-9	657361-37-0	657361-38-1	657361-39-2	657361-40-5
657361-41-6	657361-42-7	657361-43-8	657361-44-9	657361-45-0
657361-46-1	657361-47-2	657361-48-3	657361-49-4	657361-50-7
657361-51-8	657361-52-9	657361-53-0	657361-54-1	657361-55-2
657361-56-3	657361-57-4	657361-58-5	657361-59-6	657361-60-9
657361-61-0	657361-62-1	657361-63-2	657361-64-3	657361-66-5
657361-67-6	657361-68-7	657361-69-8	657361-70-1	657361-71-2
657361-72-3	657361-73-4	657361-74-5	657361-75-6	657361-76-7
657361-77-8	657361-78-9	657361-79-0	657361-80-3	657361-81-4
657361-82-5	657361-83-6	657361-84-7	657361-85-8	657361-86-9
657361-87-0	657361-88-1	657361-89-2	657361-90-5	657361-92-7
657361-93-8	657361-94-9	657361-95-0	657361-96-1	657361-97-2
657361-98-3	657361-99-4	657362-00-0	657362-01-1	657362-02-2
657362-03-3	657362-04-4	657362-05-5	657362-06-6	657362-07-7
657362-08-8	657362-09-9	657362-10-2	657362-11-3	657362-12-4
657362-13-5	657362-14-6	657362-15-7	657362-16-8	657362-17-9
657362-18-0	657362-19-1	657362-21-5	657362-22-6	657362-23-7
657362-24-8	657362-25-9	657362-26-0	657362-27-1	657362-28-2
657362-29-3	657362-30-6	657362-31-7	657362-32-8	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657362-34-0	657362-35-1	657362-36-2	657362-37-3	657362-39-5
	657362-40-8	657362-41-9	657362-42-0	657362-43-1	657362-44-2
	657362-45-3	657362-46-4	657362-47-5	657362-48-6	657362-49-7
	657362-50-0	657362-51-1	657362-52-2	657362-53-3	657362-54-4
	657362-55-5	657362-56-6	657362-57-7	657362-58-8	657362-59-9
	657362-60-2	657362-61-3	657362-62-4	657362-63-5	657362-64-6
	657362-65-7	657362-66-8	657362-67-9	657362-68-0	657362-70-4
	657362-71-5	657362-72-6	657362-73-7	657362-74-8	657362-75-9
	657362-76-0	657362-77-1	657362-78-2	657362-79-3	657362-80-6
	657362-81-7	657362-82-8	657362-83-9	657362-84-0	657362-85-1
	657362-86-2	657362-87-3	657362-88-4	657362-89-5	657362-90-8
	657362-91-9	657362-92-0	657362-93-1	657362-94-2	657362-95-3
	657362-96-4	657362-97-5	657362-98-6	657362-99-7	657363-00-3
	657363-01-4	657363-02-5	657363-03-6	657363-04-7	657363-05-8
	657363-06-9	657363-07-0	657363-08-1	657363-09-2	657363-10-5
	657363-11-6	657363-12-7	657363-13-8	657363-14-9	657363-15-0
	657363-16-1	657363-17-2	657363-18-3	657363-20-7	657363-21-8
	657363-22-9	657363-23-0	657363-25-2	657363-27-4	657363-28-5
	657363-30-9	657363-31-0	657363-33-2	657363-34-3	657363-36-5
	657363-37-6	657363-39-8	657363-40-1	657363-42-3	657363-43-4
	657363-45-6	657363-46-7	657363-47-8	657363-48-9	657363-49-0
	657363-50-3	657363-51-4	657363-52-5	657363-53-6	657363-54-7
	657363-55-8	657363-56-9	657363-57-0	657363-58-1	657363-59-2
	657363-60-5	657363-61-6	657363-62-7	657363-63-8	657363-64-9
	657363-65-0	657363-66-1	657363-67-2	657363-68-3	657363-69-4
	657363-70-7	657363-71-8	657363-72-9	657363-73-0	657363-74-1
	657363-75-2	657363-76-3	657363-77-4	657363-78-5	657363-79-6
	657363-80-9	657363-81-0	657363-82-1	657363-83-2	657363-84-3
	657363-85-4	657363-86-5	657363-87-6	657363-88-7	657363-89-8
	657363-90-1	657363-91-2	657363-92-3	657363-93-4	657363-94-5
	657363-95-6	657363-96-7	657363-97-8	657363-98-9	657363-99-0
	657364-00-6	657364-01-7	657364-02-8	657364-03-9	657364-04-0
	657364-05-1	657364-06-2	657364-07-3	657364-08-4	657364-09-5
	657364-10-8	657364-11-9	657364-13-1	657364-14-2	657364-15-3
	657364-16-4	657364-17-5	657364-18-6	657364-19-7	657364-20-0
	657364-21-1	657364-22-2	657364-23-3	657364-24-4	657364-25-5
	657364-26-6	657364-27-7	657364-28-8	657364-29-9	657364-30-2
	657364-31-3	657364-32-4	657364-33-5	657364-34-6	657364-35-7
	657364-36-8	657364-37-9	657364-38-0	657364-39-1	657364-40-4
	657364-41-5	657364-42-6	657364-43-7	657364-44-8	657364-47-1

657364-51-7	657364-53-9	657364-55-1	657364-56-2	657364-57-3
657364-59-5	657364-61-9	657364-67-5	657364-71-1	657364-73-3
657364-75-5	657364-78-8	657364-79-9	657364-80-2	657364-81-3
657364-82-4	657364-83-5	657364-84-6	657364-85-7	657364-86-8
657364-87-9	657364-88-0	657364-89-1	657364-90-4	657364-91-5
657364-92-6	657364-93-7	657364-94-8	657364-95-9	657364-96-0
657364-97-1	657364-98-2	657364-99-3	657365-00-9	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657365-01-0	657365-02-1	657365-03-2	657365-04-3	657365-05-4
	657365-06-5	657365-07-6	657365-08-7	657365-09-8	657365-10-1
	657365-11-2	657365-12-3	657365-13-4	657365-14-5	657365-15-6
	657365-16-7	657365-17-8	657365-18-9	657365-19-0	657365-20-3
	657365-21-4	657365-22-5	657365-23-6	657365-24-7	657365-25-8
	657365-26-9	657365-27-0	657365-28-1	657365-29-2	657365-30-5
	657365-31-6	657365-32-7	657365-33-8	657365-34-9	657365-35-0
	657365-36-1	657365-37-2	657365-38-3	657365-39-4	657365-40-7
	657365-41-8	657365-42-9	657365-43-0	657365-44-1	657365-45-2
	657365-46-3	657365-47-4	657365-48-5	657365-49-6	657365-50-9
	657365-51-0	657365-52-1	657365-53-2	657365-54-3	657365-55-4
	657365-56-5	657365-57-6	657365-58-7	657365-59-8	657365-60-1
	657365-61-2	657365-62-3	657365-63-4	657365-64-5	657365-65-6
	657365-66-7	657365-67-8	657365-68-9	657365-69-0	657365-70-3
	657365-71-4	657365-72-5	657365-73-6	657365-74-7	657365-75-8
	657365-76-9	657365-77-0	657365-78-1	657365-79-2	657365-80-5
	657365-81-6	657365-82-7	657365-83-8	657365-84-9	657365-85-0
	657365-86-1	657365-87-2	657365-88-3	657365-89-4	657365-90-7
	657365-92-9	657365-93-0	657365-94-1	657365-95-2	657365-96-3
	657365-97-4	657365-98-5	657365-99-6	657366-00-2	657366-01-3
	657366-02-4	657366-03-5	657366-04-6	657366-05-7	657366-06-8
	657366-07-9	657366-08-0	657366-09-1	657366-10-4	657366-11-5
	657366-12-6	657366-13-7	657366-14-8	657366-15-9	657366-16-0
	657366-17-1	657366-18-2	657366-19-3	657366-20-6	657366-21-7
	657366-22-8	657366-23-9	657366-24-0	657366-25-1	657366-26-2
	657366-27-3	657366-28-4	657366-29-5	657366-30-8	657366-31-9
	657366-32-0	657366-33-1	657366-34-2	657366-35-3	657366-36-4
	657366-37-5	657366-38-6	657366-39-7	657366-40-0	657366-41-1
	657366-42-2	657366-43-3	657366-44-4	657366-45-5	657366-46-6
	657366-47-7	657366-48-8	657366-49-9	657366-50-2	657366-51-3
	657366-52-4	657366-53-5	657366-54-6	657366-55-7	657366-56-8
	657366-57-9	657366-58-0	657366-59-1	657366-60-4	657366-61-5
	657366-62-6	657366-63-7	657366-64-8	657366-65-9	657366-66-0
	657366-67-1	657366-68-2	657366-69-3	657366-70-6	657366-71-7
	657366-72-8	657366-73-9	657366-74-0	657366-75-1	657366-76-2
	657366-77-3	657366-78-4	657366-79-5	657366-80-8	657366-81-9
	657366-82-0	657366-83-1	657366-84-2	657366-85-3	657366-86-4
	657366-87-5	657366-88-6	657366-89-7	657366-90-0	657366-91-1
	657366-92-2	657366-93-3	657366-94-4	657366-95-5	657366-96-6
	657366-97-7	657366-98-8	657366-99-9	657367-00-5	657367-01-6
	657367-02-7	657367-03-8	657367-04-9	657367-05-0	657367-06-1
	657367-07-2	657367-08-3	657367-09-4	657367-10-7	657367-11-8
	657367-12-9	657367-13-0	657367-14-1	657367-15-2	657367-16-3
	657367-17-4	657367-18-5	657367-19-6	657367-20-9	657367-21-0
	657367-22-1	657367-23-2	657367-24-3	657367-25-4	657367-26-5
	657367-27-6	657367-28-7	657367-29-8	657367-30-1	657367-31-2
	657367-32-3	657367-33-4	657367-34-5	657367-35-6	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657367-36-7	657367-37-8	657367-38-9	657367-39-0	657367-40-3
	657367-41-4	657367-42-5	657367-43-6	657367-44-7	657367-45-8

657367-46-9	657367-47-0	657367-48-1	657367-49-2	657367-50-5
657367-51-6	657367-52-7	657367-53-8	657367-54-9	657367-55-0
657367-56-1	657367-57-2	657367-58-3	657367-59-4	657367-60-7
657367-61-8	657367-62-9	657367-63-0	657367-64-1	657367-65-2
657367-66-3	657367-67-4	657367-68-5	657367-69-6	657367-70-9
657367-71-0	657367-72-1	657367-73-2	657367-74-3	657367-75-4
657367-76-5	657367-77-6	657367-78-7	657367-79-8	657367-80-1
657367-81-2	657367-82-3	657367-84-5	657367-85-6	657367-87-8
657367-89-0	657367-90-3	657367-91-4	657367-92-5	657367-93-6
657367-94-7	657367-95-8	657367-96-9	657367-97-0	
657367-98-1	657367-99-2	657368-00-8	657368-01-9	657368-02-0
657368-03-1	657368-04-2	657368-05-3	657368-06-4	657368-07-5
657368-09-7	657368-11-1	657368-13-3	657368-15-5	657368-17-7
657368-19-9	657368-21-3	657368-23-5	657368-25-7	657368-26-8
657368-29-1	657368-31-5	657368-33-7	657368-35-9	657368-37-1
657368-38-2	657368-39-3	657368-40-6	657368-41-7	657368-42-8
657368-43-9	657368-44-0	657368-45-1	657368-46-2	657368-47-3
657368-48-4	657368-49-5	657368-50-8	657368-51-9	657368-52-0
657368-53-1	657368-54-2	657368-55-3	657368-56-4	657368-57-5
657368-58-6	657368-59-7	657368-60-0	657368-61-1	657368-62-2
657368-63-3	657368-65-5	657368-66-6	657368-67-7	657368-68-8
657368-69-9	657368-70-2	657368-71-3	657368-72-4	657368-73-5
657368-74-6	657368-75-7	657368-76-8	657368-77-9	657368-78-0
657368-79-1	657368-80-4	657368-82-6	657368-83-7	657368-84-8
657368-85-9	657368-86-0	657368-87-1	657368-88-2	657368-89-3
657368-90-6	657368-91-7	657368-92-8	657368-93-9	657368-94-0
657368-95-1	657368-96-2	657368-97-3	657368-98-4	657368-99-5
657369-00-1	657369-01-2	657369-02-3	657369-03-4	657369-04-5
657369-05-6	657369-06-7	657369-07-8	657369-08-9	657369-09-0
657369-10-3	657369-11-4	657369-12-5	657369-13-6	657369-14-7
657369-15-8	657369-16-9	657369-17-0	657369-18-1	657369-19-2
657369-20-5	657369-21-6	657369-22-7	657369-23-8	657369-24-9
657369-25-0	657369-26-1	657369-27-2	657369-28-3	657369-29-4
657369-30-7	657369-31-8	657369-32-9	657369-33-0	657369-34-1
657369-35-2	657369-36-3	657369-37-4	657369-38-5	657369-39-6
657369-40-9	657369-41-0	657369-42-1	657369-43-2	657369-44-3
657369-45-4	657369-46-5	657369-47-6	657369-48-7	657369-49-8
657369-50-1	657369-51-2	657369-52-3	657369-53-4	657369-54-5
657369-55-6	657369-56-7	657369-57-8	657369-58-9	657369-59-0
657369-60-3	657369-61-4	657369-62-5	657369-63-6	657369-64-7
657369-65-8	657369-66-9	657369-67-0	657369-68-1	657369-69-2
657369-70-5	657369-71-6	657369-73-8	657369-74-9	657369-75-0
657369-76-1	657369-77-2	657369-78-3	657369-79-4	657369-80-7
657369-81-8	657369-82-9	657369-83-0	657369-84-1	657369-85-2
657369-86-3	657369-87-4	657369-88-5	657369-89-6	657369-90-9

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657369-91-0	657369-92-1	657369-93-2	657369-94-3	657369-95-4
	657369-96-5	657369-97-6	657369-98-7	657369-99-8	657370-00-8
	657370-01-9	657370-02-0	657370-03-1	657370-04-2	657370-05-3
	657370-06-4	657370-07-5	657370-08-6	657370-09-7	657370-10-0
	657370-11-1	657370-12-2	657370-13-3	657370-14-4	657370-15-5
	657370-16-6	657370-17-7	657370-18-8	657370-19-9	657370-20-2
	657370-21-3	657370-22-4	657370-23-5	657370-24-6	657370-25-7
	657370-26-8	657370-27-9	657370-28-0	657370-29-1	657370-30-4
	657370-31-5	657370-32-6	657370-33-7	657370-34-8	657370-35-9
	657370-36-0	657370-37-1	657370-38-2	657370-39-3	657370-40-6
	657370-41-7	657370-42-8	657370-43-9	657370-44-0	657370-45-1
	657370-46-2	657370-47-3	657370-48-4	657370-49-5	657370-50-8
	657370-51-9	657370-52-0	657370-53-1	657370-54-2	657370-55-3
	657370-56-4	657370-57-5	657370-58-6	657370-59-7	657370-60-0
	657370-61-1	657370-62-2	657370-63-3	657370-64-4	657370-65-5
	657370-66-6	657370-67-7	657370-68-8	657370-69-9	657370-70-2

657370-71-3	657370-72-4	657370-73-5	657370-74-6	657370-75-7
657370-76-8	657370-77-9	657370-78-0	657370-79-1	657370-80-4
657370-81-5	657370-82-6	657370-83-7	657370-84-8	657370-85-9
657370-86-0	657370-87-1	657370-88-2	657370-89-3	657370-90-6
657370-91-7	657370-92-8	657370-93-9	657370-94-0	657370-95-1
657370-96-2	657370-97-3	657370-98-4	657370-99-5	657371-00-1
657371-01-2	657371-02-3	657371-03-4	657371-04-5	657371-05-6
657371-06-7	657371-07-8	657371-08-9	657371-09-0	657371-10-3
657371-11-4	657371-12-5	657371-13-6	657371-14-7	657371-15-8
657371-16-9	657371-17-0	657371-18-1	657371-19-2	657371-20-5
657371-21-6	657371-22-7	657371-23-8	657371-24-9	657371-25-0
657371-26-1	657371-27-2	657371-28-3	657371-29-4	657371-30-7
657371-31-8	657371-32-9	657371-33-0	657371-34-1	657371-35-2
657371-36-3	657371-37-4	657371-38-5	657371-39-6	657371-40-9
657371-41-0	657371-42-1	657371-43-2	657371-44-3	657371-45-4
657371-46-5	657371-47-6	657371-48-7	657371-49-8	657371-50-1
657371-51-2	657371-52-3	657371-53-4	657371-54-5	657371-55-6
657371-56-7	657371-57-8	657371-58-9	657371-59-0	657371-60-3
657371-61-4	657371-62-5	657371-63-6	657371-64-7	657371-65-8
657371-66-9	657371-67-0	657371-68-1	657371-69-2	657371-70-5
657371-71-6	657371-72-7	657371-73-8	657371-74-9	657371-75-0
657371-76-1	657371-77-2	657371-78-3	657371-79-4	657371-80-7
657371-81-8	657371-82-9	657371-83-0	657371-84-1	657371-85-2
657371-86-3	657371-87-4	657371-88-5	657371-89-6	657371-90-9
657371-91-0	657371-92-1	657371-93-2	657371-94-3	657371-95-4
657371-96-5	657371-97-6	657371-98-7	657371-99-8	657372-00-4
657372-01-5	657372-02-6	657372-03-7	657372-04-8	657372-05-9
657372-06-0	657372-07-1	657372-08-2	657372-09-3	657372-10-6
657372-11-7	657372-12-8	657372-13-9	657372-14-0	657372-15-1
657372-16-2	657372-17-3	657372-18-4	657372-19-5	657372-20-8
657372-21-9	657372-22-0	657372-23-1	657372-24-2	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657372-25-3	657372-26-4	657372-27-5	657372-28-6	657372-29-7
	657372-30-0	657372-31-1	657372-32-2	657372-33-3	657372-34-4
	657372-35-5	657372-36-6	657372-38-8	657372-39-9	657372-40-2
	657372-41-3	657372-42-4	657372-43-5	657372-44-6	657372-45-7
	657372-46-8	657372-47-9	657372-48-0	657372-49-1	657372-50-4
	657372-51-5	657372-52-6	657372-53-7	657372-54-8	657372-55-9
	657372-57-1	657372-58-2	657372-59-3	657372-60-6	657372-61-7
	657372-62-8	657372-63-9	657372-64-0	657372-65-1	657372-66-2
	657372-67-3	657372-68-4	657372-69-5	657372-70-8	657372-71-9
	657372-72-0	657372-73-1	657372-74-2	657372-75-3	657372-76-4
	657372-77-5	657372-78-6	657372-79-7	657372-80-0	657372-81-1
	657372-83-3	657372-84-4	657372-85-5	657372-86-6	657372-87-7
	657372-88-8	657372-89-9	657372-90-2	657372-91-3	657372-92-4
	657372-93-5	657372-94-6	657372-95-7	657372-96-8	657372-97-9
	657372-98-0	657372-99-1	657373-00-7	657373-01-8	657373-02-9
	657373-03-0	657373-04-1	657373-05-2	657373-06-3	657373-07-4
	657373-08-5	657373-09-6	657373-10-9	657373-11-0	657373-12-1
	657373-13-2	657373-14-3	657373-15-4	657373-16-5	657373-17-6
	657373-18-7	657373-19-8	657373-20-1	657373-21-2	657373-22-3
	657373-23-4	657373-24-5	657373-25-6	657373-26-7	657373-27-8
	657373-28-9	657373-29-0	657373-30-3	657373-31-4	657373-32-5
	657373-33-6	657373-34-7	657373-35-8	657373-36-9	657373-37-0
	657373-38-1	657373-39-2	657373-40-5	657373-41-6	657373-42-7
	657373-43-8	657373-44-9	657373-45-0	657373-46-1	657373-47-2
	657373-48-3	657373-49-4	657373-50-7	657373-51-8	657373-52-9
	657373-53-0	657373-54-1	657373-55-2	657373-56-3	657373-57-4
	657373-58-5	657373-59-6	657373-60-9	657373-61-0	657373-62-1
	657373-63-2	657373-64-3	657373-65-4	657373-66-5	657373-67-6
	657373-68-7	657373-69-8	657373-70-1	657373-71-2	657373-72-3
	657373-73-4	657373-74-5	657373-75-6	657373-76-7	657373-77-8

657373-78-9	657373-79-0	657373-80-3	657373-81-4	657373-82-5
657373-83-6	657373-84-7	657373-85-8	657373-86-9	657373-87-0
657373-88-1	657373-89-2	657373-90-5	657373-91-6	657373-92-7
657373-93-8	657373-94-9	657373-95-0	657373-96-1	657373-97-2
657373-98-3	657373-99-4	657374-00-0	657374-01-1	657374-02-2
657374-03-3	657374-04-4	657374-05-5	657374-06-6	657374-07-7
657374-08-8	657374-09-9	657374-10-2	657374-11-3	657374-12-4
657374-13-5	657374-14-6	657374-15-7	657374-16-8	657374-17-9
657374-18-0	657374-19-1	657374-20-4	657374-21-5	657374-22-6
657374-23-7	657374-24-8	657374-25-9	657374-26-0	657374-27-1
657374-28-2	657374-29-3	657374-30-6	657374-31-7	657374-32-8
657374-33-9	657374-34-0	657374-35-1	657374-36-2	657374-37-3
657374-38-4	657374-39-5	657374-40-8	657374-41-9	657374-42-0
657374-43-1	657374-44-2	657374-45-3	657374-46-4	657374-47-5
657374-48-6	657374-49-7	657374-50-0	657374-51-1	657374-52-2
657374-53-3	657374-54-4	657374-55-5	657374-56-6	657374-57-7
657374-58-8	657374-59-9	657374-60-2	657374-61-3	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657374-62-4	657374-63-5	657374-64-6	657374-65-7	657374-66-8
	657374-67-9	657374-68-0	657374-69-1	657374-70-4	657374-71-5
	657374-72-6	657374-73-7	657374-74-8	657374-75-9	657374-76-0
	657374-77-1	657374-79-3	657374-80-6	657374-81-7	657374-83-9
	657374-84-0	657374-85-1	657374-86-2	657374-87-3	657374-88-4
	657374-89-5	657374-90-8	657374-91-9	657374-92-0	657374-93-1
	657374-94-2	657374-95-3	657374-96-4	657374-97-5	657374-98-6
	657374-99-7	657375-00-3	657375-01-4	657375-02-5	657375-03-6
	657375-04-7	657375-05-8	657375-06-9	657375-07-0	657375-08-1
	657375-09-2	657375-10-5	657375-11-6	657375-12-7	657375-13-8
	657375-14-9	657375-15-0	657375-16-1	657375-17-2	657375-18-3
	657375-19-4	657375-20-7	657375-21-8	657375-23-0	657375-24-1
	657375-25-2	657375-26-3	657375-27-4	657375-28-5	657375-29-6
	657375-30-9	657375-31-0	657375-32-1	657375-33-2	657375-35-4
	657375-36-5	657375-37-6	657375-38-7	657375-39-8	657375-40-1
	657375-41-2	657375-42-3	657375-43-4	657375-44-5	657375-45-6
	657375-46-7	657375-47-8	657375-48-9	657375-49-0	657375-50-3
	657375-51-4	657375-52-5	657375-53-6	657375-54-7	657375-55-8
	657375-56-9	657375-57-0	657375-58-1	657375-59-2	657375-60-5
	657375-61-6	657375-62-7	657375-63-8	657375-64-9	657375-65-0
	657375-66-1	657375-67-2	657375-68-3	657375-69-4	657375-70-7
	657375-71-8	657375-72-9	657375-73-0	657375-74-1	657375-75-2
	657375-76-3	657375-77-4	657375-78-5	657375-79-6	657375-80-9
	657375-81-0	657375-82-1	657375-83-2	657375-84-3	657375-85-4
	657375-86-5	657375-87-6	657375-88-7	657375-89-8	657375-90-1
	657375-91-2	657375-92-3	657375-93-4	657375-94-5	657375-95-6
	657375-96-7	657375-97-8	657375-98-9	657375-99-0	657376-00-6
	657376-01-7	657376-02-8	657376-03-9	657376-04-0	657376-05-1
	657376-06-2	657376-07-3	657376-08-4	657376-09-5	657376-10-8
	657376-11-9	657376-12-0	657376-13-1	657376-15-3	657376-16-4
	657376-17-5	657376-18-6	657376-19-7	657376-20-0	657376-21-1
	657376-22-2	657376-23-3	657376-24-4	657376-25-5	657376-26-6
	657376-27-7	657376-28-8	657376-29-9	657376-30-2	657376-31-3
	657376-32-4	657376-33-5	657376-34-6	657376-35-7	657376-36-8
	657376-37-9	657376-38-0	657376-39-1	657376-40-4	657376-41-5
	657376-42-6	657376-43-7	657376-44-8	657376-45-9	657376-46-0
	657376-47-1	657376-48-2	657376-49-3	657376-50-6	657376-51-7
	657376-52-8	657376-53-9	657376-54-0	657376-55-1	657376-56-2
	657376-57-3	657376-58-4	657376-59-5	657376-60-8	657376-61-9
	657376-62-0	657376-63-1	657376-64-2	657376-65-3	657376-66-4
	657376-67-5	657376-68-6	657376-69-7	657376-70-0	657376-71-1
	657376-72-2	657376-73-3	657376-74-4	657376-75-5	657376-76-6
	657376-77-7	657376-78-8	657376-79-9	657376-80-2	657376-81-3
	657376-82-4	657376-83-5	657376-84-6	657376-85-7	657376-86-8

657376-87-9 657376-88-0 657376-89-1 657376-90-4 657376-91-5
 657376-92-6 657376-93-7 657376-94-8 657376-95-9 657376-96-0
 657376-97-1 657376-98-2 657376-99-3 657377-00-9

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657377-01-0	657377-02-1	657377-03-2	657377-04-3	657377-05-4
	657377-06-5	657377-08-7	657377-09-8	657377-10-1	657377-11-2
	657377-12-3	657377-13-4	657377-14-5	657377-15-6	657377-16-7
	657377-17-8	657377-18-9	657377-19-0	657377-20-3	657377-21-4
	657377-22-5	657377-23-6	657377-24-7	657377-25-8	657377-26-9
	657377-27-0	657377-28-1	657377-29-2	657377-30-5	657377-31-6
	657377-32-7	657377-33-8	657377-34-9	657377-35-0	657377-36-1
	657377-37-2	657377-38-3	657377-39-4	657377-40-7	657377-41-8
	657377-42-9	657377-43-0	657377-44-1	657377-45-2	657377-46-3
	657377-47-4	657377-48-5	657377-49-6	657377-50-9	657377-51-0
	657377-52-1	657377-53-2	657377-54-3	657377-55-4	657377-56-5
	657377-57-6	657377-58-7	657377-59-8	657377-60-1	657377-61-2
	657377-62-3	657377-63-4	657377-64-5	657377-65-6	657377-66-7
	657377-67-8	657377-68-9	657377-69-0	657377-70-3	657377-71-4
	657377-72-5	657377-73-6	657377-75-8	657377-76-9	657377-77-0
	657377-78-1	657377-79-2	657377-80-5	657377-81-6	657377-82-7
	657377-83-8	657377-84-9	657377-85-0	657377-86-1	657377-87-2
	657377-88-3	657377-89-4	657377-90-7	657377-91-8	657377-92-9
	657377-93-0	657377-94-1	657377-95-2	657377-96-3	657377-97-4
	657377-98-5	657377-99-6	657378-00-2	657378-01-3	657378-02-4
	657378-03-5	657378-04-6	657378-05-7	657378-06-8	657378-07-9
	657378-08-0	657378-09-1	657378-10-4	657378-11-5	657378-12-6
	657378-13-7	657378-14-8	657378-15-9	657378-16-0	657378-17-1
	657378-18-2	657378-19-3	657378-21-7	657378-22-8	657378-23-9
	657378-24-0	657378-25-1	657378-26-2	657378-27-3	657378-28-4
	657378-29-5	657378-30-8	657378-31-9	657378-32-0	657378-33-1
	657378-34-2	657378-35-3	657378-36-4	657378-37-5	657378-38-6
	657378-39-7	657378-40-0	657378-41-1	657378-42-2	657378-43-3
	657378-44-4	657378-45-5	657378-46-6	657378-47-7	657378-48-8
	657378-49-9	657378-50-2	657378-51-3	657378-52-4	657378-53-5
	657378-54-6	657378-55-7	657378-56-8	657378-57-9	657378-58-0
	657378-59-1	657378-60-4	657378-61-5	657378-62-6	657378-64-8
	657378-65-9	657378-66-0	657378-67-1	657378-68-2	657378-69-3
	657378-70-6	657378-71-7	657378-72-8	657378-73-9	657378-74-0
	657378-75-1	657378-76-2	657378-77-3	657378-78-4	657378-79-5
	657378-80-8	657378-81-9	657378-82-0	657378-83-1	657378-84-2
	657378-85-3	657378-86-4	657378-87-5	657378-88-6	657378-89-7
	657378-90-0	657378-91-1	657378-92-2	657378-93-3	657378-94-4
	657378-95-5	657378-96-6	657378-97-7	657378-98-8	657378-99-9
	657379-00-5	657379-01-6	657379-02-7	657379-03-8	657379-04-9
	657379-05-0	657379-06-1	657379-07-2	657379-08-3	657379-09-4
	657379-10-7	657379-11-8	657379-12-9	657379-13-0	657379-14-1
	657379-16-3	657379-17-4	657379-18-5	657379-19-6	657379-20-9
	657379-21-0	657379-22-1	657379-23-2	657379-24-3	657379-25-4
	657379-26-5	657379-27-6	657379-28-7	657379-29-8	657379-30-1
	657379-31-2	657379-32-3	657379-33-4	657379-34-5	657379-35-6
	657379-36-7	657379-37-8	657379-38-9	657379-39-0	

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657379-40-3	657379-41-4	657379-42-5	657379-43-6	657379-44-7
	657379-45-8	657379-46-9	657379-47-0	657379-48-1	657379-49-2
	657379-50-5	657379-51-6	657379-52-7	657379-53-8	657379-54-9
	657379-55-0	657379-56-1	657379-57-2	657379-58-3	657379-59-4
	657379-60-7	657379-61-8	657379-62-9	657379-63-0	657379-64-1
	657379-65-2	657379-66-3	657379-67-4	657379-68-5	657379-69-6

657379-70-9	657379-71-0	657379-72-1	657379-73-2	657379-74-3
657379-75-4	657379-76-5	657379-77-6	657379-78-7	657379-79-8
657379-80-1	657379-81-2	657379-82-3	657379-83-4	657379-84-5
657379-85-6	657379-86-7	657379-87-8	657379-88-9	657379-89-0
657379-90-3	657379-91-4	657379-94-7	657379-95-8	657379-96-9
657379-97-0	657379-98-1	657379-99-2	657380-00-2	657380-01-3
657380-02-4	657380-03-5	657380-04-6	657380-05-7	657380-06-8
657380-07-9	657380-08-0	657380-09-1	657380-10-4	657380-11-5
657380-12-6	657380-13-7	657380-14-8	657380-15-9	657380-16-0
657380-17-1	657380-18-2	657380-19-3	657380-20-6	657380-21-7
657380-22-8	657380-23-9	657380-24-0	657380-25-1	657380-26-2
657380-27-3	657380-28-4	657380-29-5	657380-31-9	657380-32-0
657380-33-1	657380-34-2	657380-35-3	657380-36-4	657380-37-5
657380-38-6	657380-39-7	657380-40-0	657380-41-1	657380-42-2
657380-43-3	657380-44-4	657380-45-5	657380-46-6	657380-47-7
657380-48-8	657380-49-9	657380-50-2	657380-51-3	
657380-52-4	657380-53-5	657380-54-6	657380-55-7	657380-56-8
657380-57-9	657380-58-0	657380-59-1	657380-60-4	657380-61-5
657380-62-6	657380-63-7	657380-64-8	657380-65-9	657380-66-0
657380-67-1	657380-68-2	657380-69-3	657380-70-6	657380-71-7
657380-72-8	657380-73-9	657380-74-0	657380-75-1	657380-76-2
657380-77-3	657380-78-4	657380-79-5	657380-80-8	657380-81-9
657380-82-0	657380-83-1	657380-84-2	657380-85-3	657380-86-4
657380-87-5	657380-88-6	657380-89-7	657380-90-0	657380-91-1
657380-92-2	657380-93-3	657380-95-5	657380-96-6	657380-97-7
657380-98-8	657380-99-9	657381-00-5	657381-01-6	657381-02-7
657381-03-8	657381-04-9	657381-05-0	657381-06-1	657381-07-2
657381-08-3	657381-09-4	657381-10-7	657381-11-8	657381-12-9
657381-13-0	657381-14-1	657381-15-2	657381-16-3	657381-17-4
657381-18-5	657381-19-6	657381-20-9	657381-21-0	657381-22-1
657381-23-2	657381-24-3	657381-25-4	657381-26-5	657381-27-6
657381-28-7	657381-29-8	657381-30-1	657381-31-2	657381-32-3
657381-33-4	657381-34-5	657381-35-6	657381-36-7	657381-37-8
657381-38-9	657381-39-0	657381-40-3	657381-41-4	657381-42-5
657381-43-6	657381-44-7	657381-45-8	657381-46-9	657381-47-0
657381-48-1	657381-49-2	657381-50-5	657381-51-6	657381-52-7
657381-53-8	657381-54-9	657381-55-0	657381-56-1	657381-57-2
657381-58-3	657381-59-4	657381-60-7	657381-61-8	657381-62-9
657381-63-0	657381-64-1	657381-65-2	657381-66-3	657381-67-4
657381-68-5	657381-69-6	657381-70-9	657381-71-0	657381-72-1
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RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

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RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

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RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	657386-93-1	657386-95-3	657386-96-4	657386-97-5	657386-98-6
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RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

IT	890-38-0, Deoxyinosine	951-78-0, Deoxyuridine
	RL: BSU (Biological study, unclassified); BIOL (Biological study)	
	(immunomodulating oligodeoxyribonucleotide containing; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)	
IT	25104-18-1, L-Lysine, homopolymer	
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)	
	(immunostimulatory; alternative reading frame (ncORF) antigenic determinants from viruses and uses in vaccines)	

IT 657367-96-9 657380-51-3

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

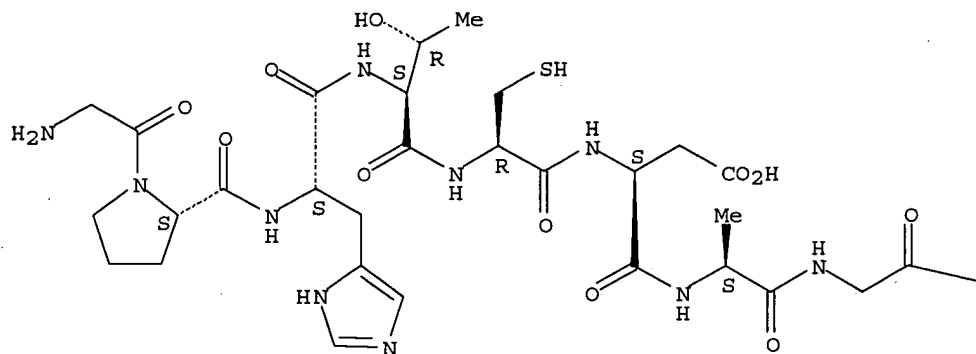
(amino acid sequence; alternative reading frame (ncORF) antigenic
 determinants from viruses and uses in vaccines)

RN 657367-96-9 HCAPLUS

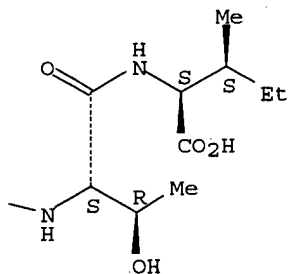
CN L-Isoleucine, glycyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyl-L- α -
 aspartyl-L-alanylglycyl-L-threonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

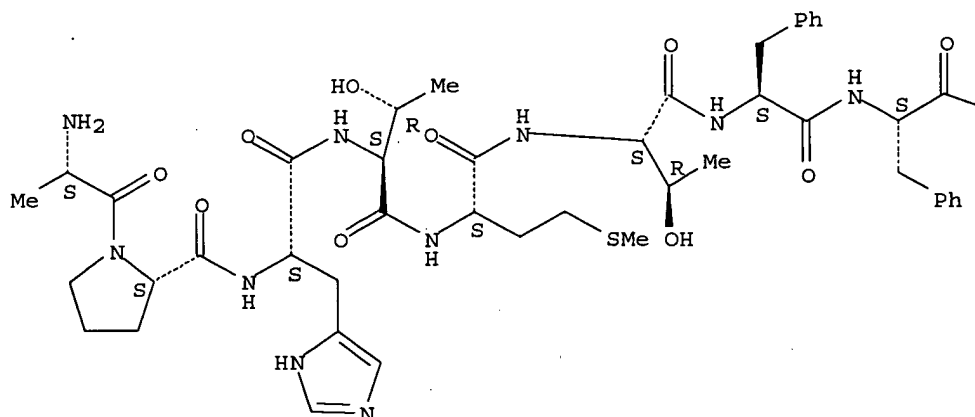


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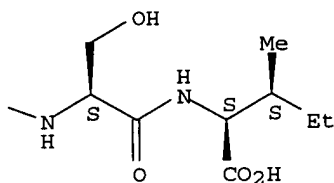
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 threonyl-L-phenylalanyl-L-phenylalanyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:41732 HCAPLUS

DN 140:110124

ED Entered STN: 18 Jan 2004

TI Glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura

IN Siegel, Donald L.

PA The Trustees of the University of Pennsylvania, USA

SO PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 9, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005890	A2	20040115	WO 2003-US21304	20030703 <--
WO 2004005890	A3	20040527		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,

Search done by Noble Jarrell

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2491471 AA 20040115 CA 2003-2491471 20030703 <--
 EP 1539236 A2 20050615 EP 2003-763334 20030703 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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 PRAI US 2002-394352P P 20020703 <--
 US 2002-411694P P 20020918 <--
 WO 2003-US21304 W 20030703

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004005890	ICM	G01N
WO 2004005890	ECLA	C07K016/00A; C07K016/28B14; G01N033/86 <--
EP 1539236	ECLA	C07K016/00A; C07K016/28B14; G01N033/86 <--
AB		The present invention relates to novel methods of identifying and producing an anti-platelet autoantibody. More preferably, the invention relates to identification and production of a human monoclonal anti-platelet autoantibody. Addnl., the invention relates to methods for producing and identifying inhibitors of an anti-platelet autoantibody binding with a platelet, or a platelet component e.g. glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX. Moreover, the invention relates to methods for treating or alleviating a disease, disorder or condition mediated by an anti-platelet autoantibody specifically binding with a platelet, or a component thereof, such as, but not limited to, idiopathic thrombocytopenic purpura, among others.
ST		glycoprotein GPIaIIa GPIIbIIIa GPIbIX autoantibody platelet idiopathic thrombocytopenic purpura; phage display library antibody screening
IT		Proteins RL: BSU (Biological study, unclassified); BUU (Biological use; unclassified); BIOL (Biological study); USES (Uses) (A, Staphylococcal; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
IT		Glycoproteins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (GP IX, complex with Ib and V; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
IT		Glycoproteins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (GP V, complex with Ib and IX; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
IT		Glycoproteins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (GPIb, complex with IX and V; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
IT		Antibodies and Immunoglobulins RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (IgG, immobilized; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
IT		Antibodies and Immunoglobulins RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (IgG, monoclonal; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (IgG; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Platelet (blood)
 (adhesion, inhibitors; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (autoantibodies, monoclonal; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (autoantibodies; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Fibronectins
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
 (binding inhibition; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (fragments; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Anticoagulants
 Autoimmune disease
 B cell (lymphocyte)
 Blood coagulation
 DNA sequences
 Drug screening
 Human
 Immunotherapy
 Mammalia
 Medical goods
 Molecular cloning
 Panning
 Phage display library
 Platelet (blood)
 Platelet aggregation inhibitors
 Protein sequences
 Test kits
 cDNA sequences
 (glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Gene, animal
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)

- (glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Nucleic acids
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(heavy chain; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Purpura (disease)
(idiopathic thrombocytopenic; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Diagnosis
(immunodiagnosis; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Drug delivery systems
(immunotoxins; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Peptides, biological studies
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(inhibitor; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Thrombus
(inhibitors; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(library; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(light chain; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Epitopes
(mapping; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Antibodies and Immunoglobulins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Adhesion, biological
(platelet, inhibitors; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX

- to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Staphylococcus
(protein A; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Receptors
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(von Willebrand factor; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Integrins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(α IIB β 3; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT Integrins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(α 2 β 1; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT 647916-11-8P 647916-13-0P 647916-15-2P 647916-16-3P 647916-19-6P
647916-22-1P 647916-24-3P 647916-26-5P 647916-27-6P 647916-28-7P
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647916-41-4P 647916-43-6P 647916-44-7P 647916-45-8P 647916-46-9P
647916-52-7P 647916-55-0P 647916-56-1P 647916-57-2P 647916-58-3P
647916-62-9P 647916-64-1P 647916-66-3P 647916-68-5P 647916-70-9P
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647917-08-6P 647917-10-0P 647917-12-2P 647917-13-3P 647917-29-1P
647917-30-4P 647917-31-5P 647917-46-2P 647917-48-4P, Integrin
 α IIB (human)
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT 643029-07-6, GenBank P08514 647825-71-6 647825-72-7 647825-73-8
647825-75-0 647825-76-1 647825-77-2 647825-78-3 647825-79-4
647825-80-7 647825-81-8 647825-82-9 647825-83-0
647825-84-1 647825-85-2 647825-86-3 647825-87-4 647825-88-5
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647866-17-9 647866-18-0 647866-19-1 647866-20-4 647866-21-5
647866-22-6 647866-23-7 647866-24-8 647866-25-9 647866-26-0
647866-27-1 647866-28-2 647866-29-3 647866-30-6 647866-31-7
647866-32-8 647866-33-9 647866-34-0 647866-35-1
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)
- IT 109319-16-6
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(multimer; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)

IT 647916-10-7P 647916-12-9P 647916-14-1P 647916-17-4P 647916-20-9P
 647916-21-0P 647916-23-2P 647916-25-4P 647916-29-8P 647916-33-4P
 647916-35-6P 647916-36-7P 647916-37-8P 647916-38-9P 647916-39-0P
 647916-42-5P 647916-47-0P 647916-48-1P 647916-50-5P 647916-51-6P
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 647916-63-0P 647916-65-2P 647916-67-4P 647916-69-6P 647916-71-0P
 647916-74-3P 647916-75-4P 647916-77-6P 647916-79-8P 647916-82-3P
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 647917-09-7P 647917-11-1P 647917-26-8P 647917-27-9P 647917-28-0P
 647917-38-2P 647917-39-3P 647917-47-3P

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
 BSU (Biological study, unclassified); DGN (Diagnostic use); PRP

(Properties); THU (Therapeutic use); ANST (Analytical study); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(nucleotide sequence; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)

IT 173319-74-9 311337-02-7

RL: PRP (Properties)

(unclaimed sequence; glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)

IT 647825-82-9

RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

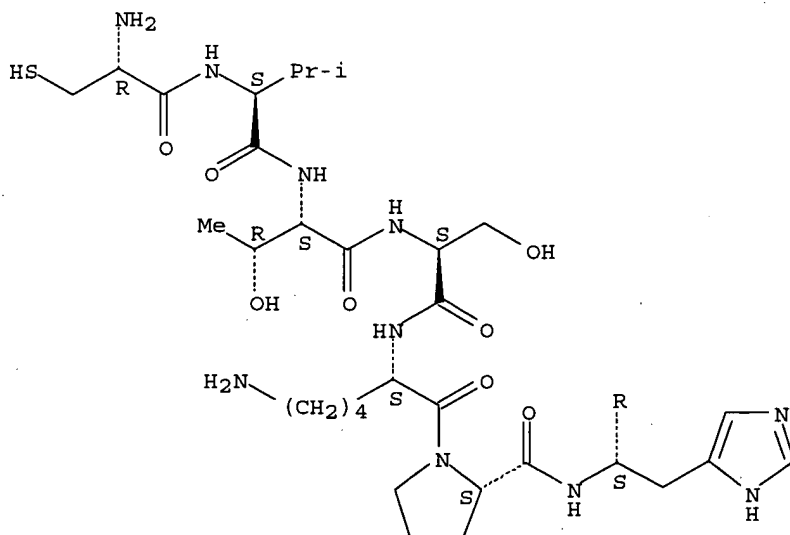
(glycoproteins GPIa/IIa, GPIIb/IIIa and GPIb/IX to identify anti-platelet autoantibodies and inhibitors and for diagnosis and therapy of idiopathic thrombocytopenic purpura)

RN 647825-82-9 HCAPLUS

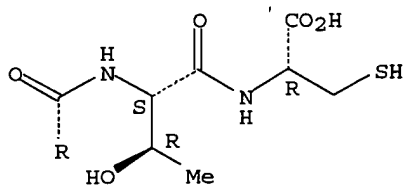
CN L-Cysteine, L-cysteinyl-L-valyl-L-threonyl-L-seryl-L-lysyl-L-prolyl-L-histidyl-L-threonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L24 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:3693 HCAPLUS
 DN 140:72162
 ED Entered STN: 04 Jan 2004
 TI Cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins
 IN Moore, Paul A.; Ruben, Steven M.; Lafleur, David W.; Shi, Yanggu; Rosen, Craig A.; Olsen, Henrik S.; Ebner, Reinhard; Brewer, Laurie A.
 PA Human Genome Sciences, Inc., USA
 SO U.S. Pat. Appl. Publ., 383 pp., Cont.-in-part of U.S. Ser. No. 722,329.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C07K001-00
 ICS C07K014-00; C07K017-00
 INCL 530395000
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6, 13, 63

FAN.CNT 43

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004002591	A1	20040101	US 2002-47021	20020117 <--
	WO 9911293	A1	19990311	WO 1998-US18360	19980903 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 1997-57626P	P	19970905	<--	
	US 1997-57663P	P	19970905	<--	
	US 1997-57669P	P	19970905	<--	
	US 1997-58666P	P	19970912	<--	
	US 1997-58667P	P	19970912	<--	
	US 1997-58973P	P	19970912	<--	
	US 1997-58974P	P	19970912	<--	
	US 1998-90112P	P	19980622	<--	
	WO 1998-US18360	A2	19980903	<--	
	US 1999-262109	B1	19990304	<--	
	US 2000-722329	A2	20001128	<--	
	US 2001-262066P	P	20010118	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 2004002591	ICM	C07K001-00	
	ICS	C07K014-00; C07K017-00	
	INCL	530395000	
US 2004002591	NCL	530/395.000	
	ECLA	C07K014/47	<--
WO 9911293	ECLA	C07K014/47	<--
AB	The present invention relates to 50 novel human secreted proteins and		

Search done by Noble Jarrell

isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.

ST secretory protein cDNA sequence human

IT High throughput screening

(assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Epitopes

Human

Molecular cloning

Protein sequences

cDNA sequences

(cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Gene, animal

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Disease, animal

(diagnosis and treatment of; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Animal tissue

(expression profiles; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Genetic mapping

(gene location on human chromosome; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Chromosome

(human, gene location on; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Diagnosis

(mol., by mutation detection or changes in expression; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Proteins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(secretory; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT 221104-60-5P 221104-61-6P 221104-62-7P 221104-63-8P 221104-64-9P

221104-65-0P 221104-66-1P 221148-90-9P 221148-91-0P 221148-92-1P

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640300-32-9P 640300-33-0P 640300-34-1P 640300-35-2P 640300-36-3P

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640300-42-1P 640300-43-2P 640300-44-3P 640300-45-4P 640300-47-6P

640300-48-7P 640300-49-8P 640300-50-1P 640300-51-2P 640300-52-3P

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640300-73-8P 640300-74-9P 640300-75-0P 640300-76-1P 640300-77-2P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT	640299-64-5P	640299-65-6P	640299-66-7P	640299-67-8P	640299-68-9P
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	640299-75-8P	640299-77-0P	640299-78-1P	640299-79-2P	640299-80-5P
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	640300-21-6P	640300-22-7P	640300-23-8P	640300-25-0P	640774-01-2P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT	640306-77-0	640306-79-2	640306-80-5	640306-81-6	640306-82-7
	640306-83-8	640306-84-9	640306-85-0	640306-86-1	

RL: PRP (Properties)

(unclaimed nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT	640306-78-1	640306-87-2	640306-88-3	640306-89-4	640306-90-7
	640306-91-8	640306-92-9	640306-93-0	640306-94-1	640306-95-2
	640306-96-3	640306-97-4	640306-98-5	640306-99-6	640307-00-2
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	640307-21-7	640307-22-8	640307-23-9	640307-24-0	640307-25-1
	640307-26-2	640307-27-3	640307-28-4	640307-29-5	640307-30-8

RL: PRP (Properties)

(unclaimed protein sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT	443339-65-9	443339-66-0	443339-67-1	443339-68-2	443339-69-3
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	443339-80-8	443339-81-9	443339-82-0	443339-83-1	443339-84-2
	443339-85-3	443339-87-5	443339-88-6	443339-89-7	443339-90-0
	443339-91-1	443339-92-2	443339-93-3	443339-94-4	443339-95-5
	443339-96-6	443339-97-7	443339-98-8	443339-99-9	
	443340-00-9	443340-01-0	443340-02-1	443340-04-3	640274-10-8

RL: PRP (Properties)

(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT 443339-97-7

RL: PRP (Properties)

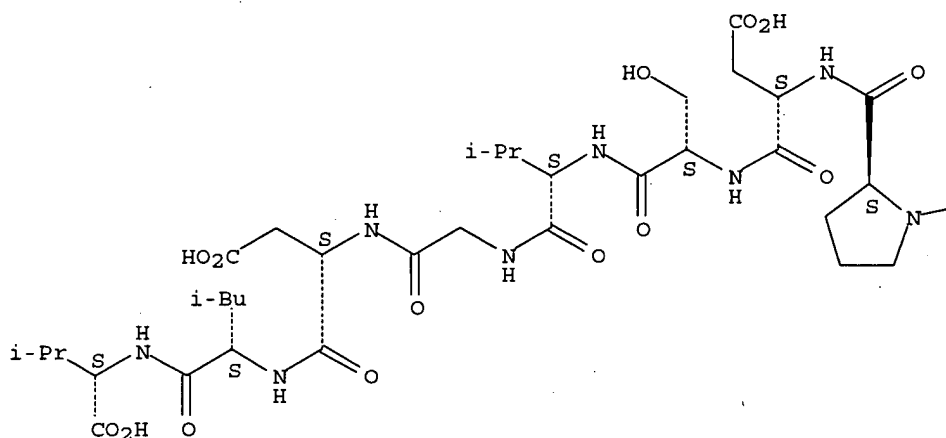
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

RN 443339-97-7 HCAPLUS

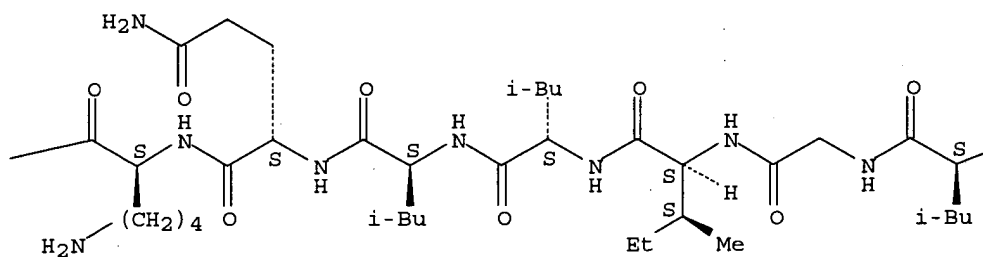
CN L-Valine, L-alanyl-L-leucyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-leucyl-L- α -glutamyl-L-arginyl-L-alanyl-L-lysyl-L- α -glutamyl-L-isoleucyl-L-lysyl-L-isoleucyl-L-lysyl-L-leucylglycyl-L-isoleucyl-L-leucyl-L-leucyl-L-glutamyl-L-lysyl-L-prolyl-L- α -aspartyl-L-seryl-L-valylglycyl-L- α -aspartyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

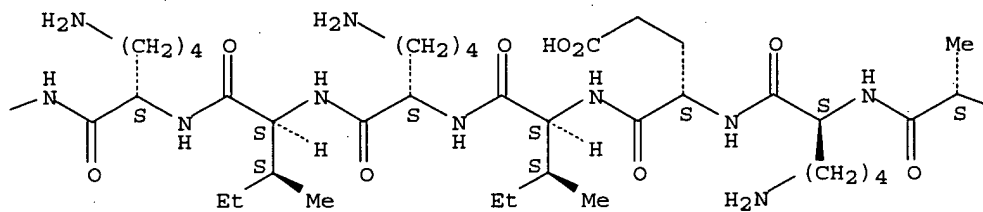
PAGE 1-A



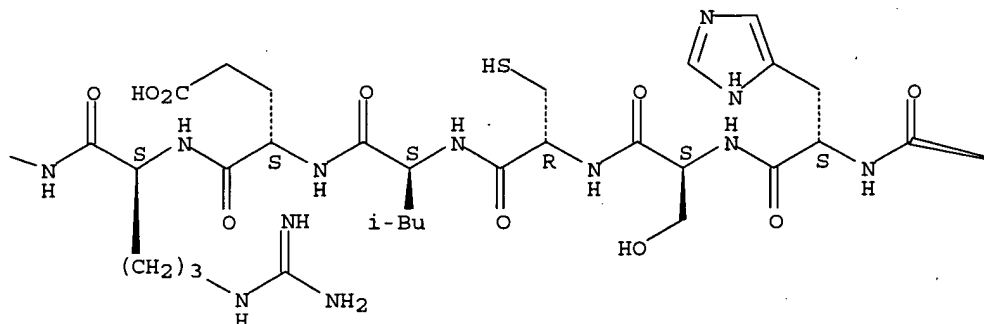
PAGE 1-B



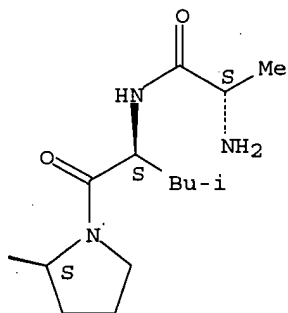
PAGE 1-C



PAGE 1-D



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L24 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:830375 HCAPLUS
 DN 139:303032
 ED Entered STN: 23 Oct 2003
 TI Human genome-derived single exon nucleic acid probes useful for analysis
 of gene expression in human tissues
 IN Penn, Sharron Gaynor; Rank, David Russell; Hanzel, David Kagen
 PA USA
 SO U.S. Pat. Appl. Publ., 80 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC C12Q001-68; C07H021-04
 INCL 435006000; 536024300
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6, 13
 FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003194704	A1	20031016	US 2002-29386	20020403 <--
	US 2003194704	A1	20031016	US 2002-29386	20020403 <--
PRAI	US 2002-29386	A	20020403	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 2003194704 IC C12Q001-68IC C07H021-04
 INCL 435006000; 536024300
 US 2003194704 NCL 435/006.000; 536/024.300 <--
 US 2003194704 NCL 435/006.000; 536/024.300 <--

AB Methods and apparatus for predicting, confirming and displaying functional regions from genomic sequence data are used to identify unique human genome-derived single exon probes useful for gene expression anal., particularly gene expression anal. by microarray. Human BAC sequences totaling .apprx.350 Mb of sequence (.apprx.10% of the human genome) were analyzed for exons using four sep. gene finding programs (GRAIL uses a neural network, GENEFINDER uses a hidden Markoff model, DICTION operates according to a different heuristic, and GENSCAN) and Mouse comparative genomics as a fifth gene prediction method. The exons were PCR amplified from genomic DNA, verified on agarose gels, and sequenced using universal primers to validate the identity of the amplicon to be spotted in microarrays. Thus, expression, homol., and functional information are provided for 13,700 unique genome-derived single exon probes are expressed at significant levels in one or more of 8 tested tissues: human brain, heart, fetal and adult liver, placenta, lung, bone marrow, and HeLa cells. The probes lack prokaryotic and bacteriophage vector sequences, as well as lacking homopolymeric stretches of A or T. Also presented are genome-derived single exon microarrays that include such probes, peptides encoded by the exons, and antibodies thereto. In addition, methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstract record is one of nine records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

ST genome exon probe microarray gene expression human lung; sequence genome exon probe human lung

IT Liver
 (adult and fetal; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Information systems
 (computerized, computer-readable storage medium; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Genetic element
 RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (exon; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Bone marrow
 Brain
 DNA microarray technology
 DNA sequences
 Gene expression profiles, animal
 Genetic vectors
 HeLa cell
 Heart
 Human
 Lung
 Molecular cloning
 Placenta
 Protein sequences
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Peptides, biological studies
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Antibodies and Immunoglobulins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Probes (nucleic acid)
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Liver
 (toxicity, adult and fetal; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT Bone marrow
 Heart
 Lung
 (toxicity; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

IT

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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human tissues)

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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

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610806-62-7	610806-63-8	610806-64-9	610806-65-0	610806-66-1
610806-67-2	610806-68-3	610806-69-4	610806-70-7	610806-71-8
610806-72-9	610806-73-0	610806-74-1	610806-75-2	610806-76-3
610806-77-4	610806-78-5	610806-79-6	610806-80-9	610806-81-0
610806-82-1	610806-83-2	610806-84-3	610806-85-4	610806-86-5
610806-87-6	610806-88-7	610806-89-8	610806-90-1	610806-91-2
610806-92-3	610806-93-4	610806-94-5	610806-95-6	610806-96-7
610806-97-8	610806-98-9	610806-99-0	610807-00-6	610807-01-7
610807-02-8	610807-03-9	610807-04-0	610807-05-1	610807-06-2
610807-07-3	610807-08-4	610807-09-5	610807-10-8	610807-11-9
610807-12-0	610807-13-1	610807-14-2	610807-15-3	610807-16-4
610807-17-5	610807-18-6	610807-19-7	610807-20-0	610807-21-1
610807-22-2	610807-23-3	610807-24-4	610807-25-5	610807-26-6
610807-27-7	610807-28-8	610807-29-9	610807-30-2	610807-31-3
610807-32-4	610807-33-5	610807-34-6	610807-35-7	610807-36-8
610807-37-9	610807-38-0	610807-39-1		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT 610807-40-4	610807-41-5	610807-42-6	610807-43-7	610807-44-8
610807-45-9	610807-46-0	610807-47-1	610807-48-2	610807-49-3
610807-50-6	610807-51-7	610807-52-8	610807-53-9	610807-54-0
610807-55-1	610807-56-2	610807-57-3	610807-58-4	610807-59-5
610807-60-8	610807-61-9	610807-62-0	610807-63-1	610807-64-2
610807-65-3	610807-66-4	610807-67-5	610807-68-6	610807-69-7
610807-70-0	610807-71-1	610807-72-2	610807-73-3	610807-74-4
610807-75-5	610807-76-6	610807-77-7	610807-78-8	610807-79-9
610807-80-2	610807-81-3	610807-82-4	610807-83-5	610807-84-6
610807-85-7	610807-86-8	610807-87-9	610807-88-0	610807-89-1
610807-90-4	610807-91-5	610807-92-6	610807-93-7	610807-94-8
610807-95-9	610807-96-0	610807-97-1	610807-98-2	610807-99-3
610808-00-9	610808-01-0	610808-02-1	610808-03-2	610808-04-3
610808-05-4	610808-06-5	610808-07-6	610808-08-7	610808-09-8
610808-10-1	610808-11-2	610808-12-3	610808-13-4	610808-14-5
610808-15-6	610808-16-7	610808-17-8	610808-18-9	610808-19-0
610808-20-3	610808-21-4	610808-22-5	610808-23-6	610808-24-7
610808-25-8	610808-26-9	610808-27-0	610808-28-1	610808-29-2
610808-30-5	610808-31-6	610808-32-7	610808-33-8	610808-34-9
610808-35-0	610808-36-1	610808-37-2	610808-38-3	610808-39-4
610808-40-7	610808-41-8	610808-42-9	610808-43-0	610808-44-1
610808-45-2	610808-46-3	610808-47-4	610808-48-5	610808-49-6
610808-50-9	610808-51-0	610808-52-1	610808-53-2	610808-54-3
610808-55-4	610808-56-5	610808-57-6	610808-58-7	610808-59-8
610808-60-1	610808-61-2	610808-62-3	610808-63-4	610808-64-5
610808-65-6	610808-66-7	610808-67-8	610808-68-9	610808-69-0
610808-70-3	610808-71-4	610808-72-5	610808-73-6	610808-74-7
610808-75-8	610808-76-9	610808-77-0	610808-78-1	610808-79-2
610808-80-5	610808-81-6	610808-82-7	610808-83-8	610808-84-9
610808-85-0	610808-86-1	610808-87-2	610808-88-3	610808-89-4
610808-90-7	610808-91-8	610808-92-9	610808-93-0	610808-94-1
610808-95-2	610808-96-3	610808-97-4	610808-98-5	610808-99-6
610809-00-2	610809-01-3	610809-02-4	610809-03-5	610809-04-6
610809-05-7	610809-06-8	610809-07-9	610809-08-0	610809-09-1
610809-10-4	610809-11-5	610809-12-6	610809-13-7	610809-14-8
610809-15-9	610809-16-0	610809-17-1	610809-18-2	610809-19-3
610809-20-6	610809-21-7	610809-22-8	610809-23-9	610809-24-0
610809-25-1	610809-26-2	610809-27-3	610809-28-4	610809-29-5

610809-30-8	610809-31-9	610809-32-0	610809-33-1	610809-34-2
610809-35-3	610809-36-4	610809-37-5	610809-38-6	610809-39-7
610809-40-0	610809-41-1	610809-42-2	610809-43-3	610809-44-4
610809-45-5	610809-46-6	610809-47-7	610809-48-8	610809-49-9
610809-50-2	610809-51-3	610809-52-4	610809-53-5	610809-54-6
610809-55-7	610809-56-8	610809-57-9	610809-58-0	610809-59-1
610809-60-4	610809-61-5	610809-62-6	610809-63-7	610809-64-8
610809-65-9	610809-66-0	610809-67-1	610809-68-2	610809-69-3
610809-70-6	610809-71-7	610809-72-8		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610809-73-9	610809-74-0	610809-75-1	610809-76-2	610809-77-3
	610809-78-4	610809-79-5	610809-80-8	610809-81-9	610809-82-0
	610809-83-1	610809-84-2	610809-85-3	610809-86-4	610809-87-5
	610809-88-6	610809-89-7	610809-90-0	610809-91-1	610809-92-2
	610809-93-3	610809-94-4	610809-95-5	610809-96-6	610809-97-7
	610809-98-8	610809-99-9	610810-00-9	610810-01-0	610810-02-1
	610810-03-2	610810-04-3	610810-05-4	610810-06-5	610810-07-6
	610810-08-7	610810-09-8	610810-10-1	610810-11-2	610810-12-3
	610810-13-4	610810-14-5	610810-15-6	610810-16-7	610810-17-8
	610810-18-9	610810-19-0	610810-20-3	610810-21-4	610810-22-5
	610810-23-6	610810-24-7	610810-25-8	610810-26-9	610810-27-0
	610810-28-1	610810-29-2	610810-30-5	610810-31-6	610810-32-7
	610810-33-8	610810-34-9	610810-35-0	610810-36-1	610810-37-2
	610810-38-3	610810-39-4	610810-40-7	610810-41-8	610810-42-9
	610810-43-0	610810-44-1	610810-45-2	610810-46-3	610810-47-4
	610810-48-5	610810-49-6	610810-50-9	610810-51-0	610810-52-1
	610810-53-2	610810-54-3	610810-55-4	610810-56-5	610810-57-6
	610810-58-7	610810-59-8	610810-60-1	610810-61-2	610810-62-3
	610810-63-4	610810-64-5	610810-65-6	610810-66-7	610810-67-8
	610810-68-9	610810-69-0	610810-70-3	610810-71-4	610810-72-5
	610810-73-6	610810-74-7	610810-75-8	610810-76-9	610810-77-0
	610810-78-1	610810-79-2	610810-80-5	610810-81-6	610810-82-7
	610810-83-8	610810-84-9	610810-85-0	610810-86-1	610810-87-2
	610810-88-3	610810-89-4	610810-90-7	610810-91-8	610810-92-9
	610810-93-0	610810-94-1	610810-95-2	610810-96-3	610810-97-4
	610810-98-5	610810-99-6	610811-00-2	610811-01-3	610811-02-4
	610811-03-5	610811-04-6	610811-05-7	610811-06-8	610811-07-9
	610811-08-0	610811-09-1	610811-10-4	610811-11-5	610811-12-6
	610811-13-7	610811-14-8	610811-15-9	610811-16-0	610811-17-1
	610811-18-2	610811-19-3	610811-20-6	610811-21-7	610811-22-8
	610811-23-9	610811-24-0	610811-25-1	610811-26-2	610811-27-3
	610811-28-4	610811-29-5	610811-30-8	610811-31-9	610811-32-0
	610811-33-1	610811-34-2	610811-35-3	610811-36-4	610811-37-5
	610811-38-6	610811-39-7	610811-40-0	610811-41-1	610811-42-2
	610811-43-3	610811-44-4	610811-45-5	610811-46-6	610811-47-7
	610811-48-8	610811-49-9	610811-50-2	610811-51-3	610811-52-4
	610811-53-5	610811-54-6	610811-55-7	610811-56-8	610811-57-9
	610811-58-0	610811-59-1	610811-60-4	610811-61-5	610811-62-6
	610811-63-7	610811-64-8	610811-65-9	610811-66-0	610811-67-1
	610811-68-2	610811-69-3	610811-70-6	610811-71-7	610811-72-8
	610811-73-9	610811-74-0	610811-75-1	610811-76-2	610811-77-3
	610811-78-4	610811-79-5	610811-80-8	610811-81-9	610811-82-0
	610811-83-1	610811-84-2	610811-85-3	610811-86-4	610811-87-5
	610811-88-6	610811-89-7	610811-90-0	610811-91-1	610811-92-2
	610811-93-3	610811-94-4	610811-95-5	610811-96-6	610811-97-7
	610811-98-8	610811-99-9	610812-00-5	610812-01-6	610812-02-7
	610812-03-8	610812-04-9	610812-05-0		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610812-06-1	610812-07-2	610812-08-3	610812-09-4	610812-10-7
	610812-11-8	610812-12-9	610812-13-0	610812-14-1	610812-15-2
	610812-16-3	610812-17-4	610812-18-5	610812-19-6	610812-20-9
	610812-21-0	610812-22-1	610812-23-2	610812-24-3	610812-25-4
	610812-26-5	610812-27-6	610812-28-7	610812-29-8	610812-30-1
	610812-31-2	610812-32-3	610812-33-4	610812-34-5	610812-35-6
	610812-36-7	610812-37-8	610812-38-9	610812-39-0	610812-40-3
	610812-41-4	610812-42-5	610812-43-6	610812-44-7	610812-45-8
	610812-46-9	610812-47-0	610812-48-1	610812-49-2	610812-50-5
	610812-51-6	610812-52-7	610812-53-8	610812-54-9	610812-55-0
	610812-56-1	610812-57-2	610812-58-3	610812-59-4	610812-60-7
	610812-61-8	610812-62-9	610812-63-0	610812-64-1	610812-65-2
	610812-66-3	610812-67-4	610812-68-5	610812-69-6	610812-70-9
	610812-71-0	610812-72-1	610812-73-2	610812-74-3	610812-75-4
	610812-76-5	610812-77-6	610812-78-7	610812-79-8	610812-80-1
	610812-81-2	610812-82-3	610812-83-4	610812-84-5	610812-85-6
	610812-86-7	610812-87-8	610812-88-9	610812-89-0	610812-90-3
	610812-91-4	610812-92-5	610812-93-6	610812-94-7	610812-95-8
	610812-96-9	610812-97-0	610812-98-1	610812-99-2	610813-00-8
	610813-01-9	610813-02-0	610813-03-1	610813-04-2	610813-05-3
	610813-06-4	610813-07-5	610813-08-6	610813-09-7	610813-10-0
	610813-11-1	610813-12-2	610813-13-3	610813-14-4	610813-15-5
	610813-16-6	610813-17-7	610813-18-8	610813-19-9	610813-20-2
	610813-21-3	610813-22-4	610813-23-5	610813-24-6	610813-25-7
	610813-26-8	610813-27-9	610813-28-0	610813-29-1	610813-30-4
	610813-31-5	610813-32-6	610813-33-7	610813-34-8	610813-35-9
	610813-36-0	610813-37-1	610813-38-2	610813-39-3	610813-40-6
	610813-41-7	610813-42-8	610813-43-9	610813-44-0	610813-45-1
	610813-46-2	610813-47-3	610813-48-4	610813-49-5	610813-50-8
	610813-51-9	610813-52-0	610813-53-1	610813-54-2	610813-55-3
	610813-56-4	610813-57-5	610813-58-6	610813-59-7	610813-60-0
	610813-61-1	610813-62-2	610813-63-3	610813-64-4	610813-65-5
	610813-66-6	610813-67-7	610813-68-8	610813-69-9	610813-70-2
	610813-71-3	610813-72-4	610813-73-5	610813-74-6	610813-75-7
	610813-76-8	610813-77-9	610813-78-0	610813-79-1	610813-80-4
	610813-81-5	610813-82-6	610813-83-7	610813-84-8	610813-85-9
	610813-86-0	610813-87-1	610813-88-2	610813-89-3	610813-90-6
	610813-91-7	610813-92-8	610813-93-9	610813-94-0	610813-95-1
	610813-96-2	610813-97-3	610813-98-4	610813-99-5	610814-00-1
	610814-01-2	610814-02-3	610814-03-4	610814-04-5	610814-05-6
	610814-06-7	610814-07-8	610814-08-9	610814-09-0	610814-10-3
	610814-11-4	610814-12-5	610814-13-6	610814-14-7	610814-15-8
	610814-16-9	610814-17-0	610814-18-1	610814-19-2	610814-20-5
	610814-21-6	610814-22-7	610814-23-8	610814-24-9	610814-25-0
	610814-26-1	610814-27-2	610814-28-3	610814-29-4	610814-30-7
	610814-31-8	610814-32-9	610814-33-0	610814-34-1	610814-35-2
	610814-36-3	610814-37-4	610814-38-5		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610814-39-6	610814-40-9	610814-41-0	610814-42-1	610814-43-2
	610814-44-3	610814-45-4	610814-46-5	610814-47-6	610814-48-7
	610814-49-8	610814-50-1	610814-51-2	610814-52-3	610814-53-4
	610814-54-5	610814-55-6	610814-56-7	610814-57-8	610814-58-9
	610814-59-0	610814-60-3	610814-61-4	610814-62-5	610814-63-6
	610814-64-7	610814-65-8	610814-66-9	610814-67-0	610814-68-1
	610814-69-2	610814-70-5	610814-71-6	610814-72-7	610814-73-8
	610814-74-9	610814-75-0	610814-76-1	610814-77-2	610814-78-3
	610814-79-4	610814-80-7	610814-81-8	610814-82-9	610814-83-0
	610814-84-1	610814-85-2	610814-86-3	610814-87-4	610814-88-5
	610814-89-6	610814-90-9	610814-91-0	610814-92-1	610814-93-2
	610814-94-3	610814-95-4	610814-96-5	610814-97-6	610814-98-7
	610814-99-8	610815-00-4	610815-01-5	610815-02-6	610815-03-7
	610815-04-8	610815-05-9	610815-06-0	610815-07-1	610815-08-2

610815-09-3	610815-10-6	610815-11-7	610815-12-8	610815-13-9
610815-14-0	610815-15-1	610815-16-2	610815-17-3	610815-18-4
610815-19-5	610815-20-8	610815-21-9	610815-22-0	610815-23-1
610815-24-2	610815-25-3	610815-26-4	610815-27-5	610815-28-6
610815-29-7	610815-30-0	610815-31-1	610815-32-2	610815-33-3
610815-34-4	610815-35-5	610815-36-6	610815-37-7	610815-38-8
610815-39-9	610815-40-2	610815-41-3	610815-42-4	610815-43-5
610815-44-6	610815-45-7	610815-46-8	610815-47-9	610815-48-0
610815-49-1	610815-50-4	610815-51-5	610815-52-6	610815-53-7
610815-54-8	610815-55-9	610815-56-0	610815-57-1	610815-58-2
610815-59-3	610815-60-6	610815-61-7	610815-62-8	610815-63-9
610815-64-0	610815-65-1	610815-66-2	610815-67-3	610815-68-4
610815-69-5	610815-70-8	610815-71-9	610815-72-0	610815-73-1
610815-74-2	610815-75-3	610815-76-4	610815-77-5	610815-78-6
610815-79-7	610815-80-0	610815-81-1	610815-82-2	610815-83-3
610815-84-4	610815-85-5	610815-86-6	610815-87-7	610815-88-8
610815-89-9	610815-90-2	610815-91-3	610815-92-4	610815-93-5
610815-94-6	610815-95-7	610815-96-8	610815-97-9	610815-98-0
610815-99-1	610816-00-7	610816-01-8	610816-02-9	610816-03-0
610816-04-1	610816-05-2	610816-06-3	610816-07-4	610816-08-5
610816-09-6	610816-10-9	610816-11-0	610816-12-1	610816-13-2
610816-14-3	610816-15-4	610816-16-5	610816-17-6	610816-18-7
610816-19-8	610816-20-1	610816-21-2	610816-22-3	610816-23-4
610816-24-5	610816-25-6	610816-26-7	610816-27-8	610816-28-9
610816-29-0	610816-30-3	610816-31-4	610816-32-5	610816-33-6
610816-34-7	610816-35-8	610816-36-9	610816-37-0	610816-38-1
610816-39-2	610816-40-5	610816-41-6	610816-42-7	610816-43-8
610816-44-9	610816-45-0	610816-46-1	610816-47-2	610816-48-3
610816-49-4	610816-50-7	610816-51-8	610816-52-9	610816-53-0
610816-54-1	610816-55-2	610816-56-3	610816-57-4	610816-58-5
610816-59-6	610816-60-9	610816-61-0	610816-62-1	610816-63-2
610816-64-3	610816-65-4	610816-66-5	610816-67-6	610816-68-7
610816-69-8	610816-70-1	610816-71-2		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610816-72-3	610816-73-4	610816-74-5	610816-75-6	610816-76-7
	610816-77-8	610816-78-9	610816-79-0	610816-80-3	610816-81-4
	610816-82-5	610816-83-6	610816-84-7	610816-85-8	610816-86-9
	610816-87-0	610816-88-1	610816-89-2	610816-90-5	610816-91-6
	610816-92-7	610816-93-8	610816-94-9	610816-95-0	610816-96-1
	610816-97-2	610816-98-3	610816-99-4	610817-00-0	610817-01-1
	610817-02-2	610817-03-3	610817-04-4	610817-05-5	610817-06-6
	610817-07-7	610817-08-8	610817-09-9	610817-10-2	610817-11-3
	610817-12-4	610817-13-5	610817-14-6	610817-15-7	610817-16-8
	610817-17-9	610817-18-0	610817-19-1	610817-20-4	610817-21-5
	610817-22-6	610817-23-7	610817-24-8	610817-25-9	610817-26-0
	610817-27-1	610817-28-2	610817-29-3	610817-30-6	610817-31-7
	610817-32-8	610817-33-9	610817-34-0	610817-35-1	610817-36-2
	610817-37-3	610817-38-4	610817-39-5	610817-40-8	610817-41-9
	610817-42-0	610817-43-1	610817-44-2	610817-45-3	610817-46-4
	610817-47-5	610817-48-6	610817-49-7	610817-50-0	610817-51-1
	610817-52-2	610817-53-3	610817-54-4	610817-55-5	610817-56-6
	610817-57-7	610817-58-8	610817-59-9	610817-60-2	610817-61-3
	610817-62-4	610817-63-5	610817-64-6	610817-65-7	610817-66-8
	610817-67-9	610817-68-0	610817-69-1	610817-70-4	610817-71-5
	610817-72-6	610817-73-7	610817-74-8	610817-75-9	610817-76-0
	610817-77-1	610817-78-2	610817-79-3	610817-80-6	610817-81-7
	610817-82-8	610817-83-9	610817-84-0	610817-85-1	610817-86-2
	610817-87-3	610817-88-4	610817-89-5	610817-90-8	610817-91-9
	610817-92-0	610817-93-1	610817-94-2	610817-95-3	610817-96-4
	610817-97-5	610817-98-6	610817-99-7	610818-00-3	610818-01-4
	610818-02-5	610818-03-6	610818-04-7	610818-05-8	610818-06-9
	610818-07-0	610818-08-1	610818-09-2	610818-10-5	610818-11-6

610818-12-7	610818-13-8	610818-14-9	610818-15-0	610818-16-1
610818-17-2	610818-18-3	610818-19-4	610818-20-7	610818-21-8
610818-22-9	610818-23-0	610818-24-1	610818-25-2	610818-26-3
610818-27-4	610818-28-5	610818-29-6	610818-30-9	610818-31-0
610818-32-1	610818-33-2	610818-34-3	610818-35-4	610818-36-5
610818-37-6	610818-38-7	610818-39-8	610818-40-1	610818-41-2
610818-42-3	610818-43-4	610818-44-5	610818-45-6	610818-46-7
610818-47-8	610818-48-9	610818-49-0	610818-50-3	610818-51-4
610818-52-5	610818-53-6	610818-54-7	610818-55-8	610818-56-9
610818-57-0	610818-58-1	610818-59-2	610818-60-5	610818-61-6
610818-62-7	610818-63-8	610818-64-9	610818-65-0	610818-66-1
610818-67-2	610818-68-3	610818-69-4	610818-70-7	610818-71-8
610818-72-9	610818-73-0	610818-74-1	610818-75-2	610818-76-3
610818-77-4	610818-78-5	610818-79-6	610818-80-9	610818-81-0
610818-82-1	610818-83-2	610818-84-3	610818-85-4	610818-86-5
610818-87-6	610818-88-7	610818-89-8	610818-90-1	610818-91-2
610818-92-3	610818-93-4	610818-94-5	610818-95-6	610818-96-7
610818-97-8	610818-98-9	610818-99-0	610819-00-6	610819-01-7
610819-02-8	610819-03-9	610819-04-0		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT 610819-05-1	610819-06-2	610819-07-3	610819-08-4	610819-09-5
610819-10-8	610819-11-9	610819-12-0	610819-13-1	610819-14-2
610819-15-3	610819-16-4	610819-17-5	610819-18-6	610819-19-7
610819-20-0	610819-21-1	610819-22-2	610819-23-3	610819-24-4
610819-25-5	610819-26-6	610819-27-7	610819-28-8	610819-29-9
610819-30-2	610819-31-3	610819-32-4	610819-33-5	610819-34-6
610819-35-7	610819-36-8	610819-37-9	610819-38-0	610819-39-1
610819-40-4	610819-41-5	610819-42-6	610819-43-7	610819-44-8
610819-45-9	610819-46-0	610819-47-1	610819-48-2	610819-49-3
610819-50-6	610819-51-7	610819-52-8	610819-53-9	610819-54-0
610819-55-1	610819-56-2	610819-57-3	610819-58-4	610819-59-5
610819-60-8	610819-61-9	610819-62-0	610819-63-1	610819-64-2
610819-65-3	610819-66-4	610819-67-5	610819-68-6	610819-69-7
610819-70-0	610819-71-1	610819-72-2	610819-73-3	610819-74-4
610819-75-5	610819-76-6	610819-77-7	610819-78-8	610819-79-9
610819-80-2	610819-81-3	610819-82-4	610819-83-5	610819-84-6
610819-85-7	610819-86-8	610819-87-9	610819-88-0	610819-89-1
610819-90-4	610819-91-5	610819-92-6	610819-93-7	610819-94-8
610819-95-9	610819-96-0	610819-97-1	610819-98-2	610819-99-3
610820-00-3	610820-01-4	610820-02-5	610820-03-6	610820-04-7
610820-05-8	610820-06-9	610820-07-0	610820-08-1	610820-09-2
610820-10-5	610820-11-6	610820-12-7	610820-13-8	610820-14-9
610820-15-0	610820-16-1	610820-17-2	610820-18-3	610820-19-4
610820-20-7	610820-21-8	610820-22-9	610820-23-0	610820-24-1
610820-25-2	610820-26-3	610820-27-4	610820-28-5	610820-29-6
610820-30-9	610820-31-0	610820-32-1	610820-33-2	610820-34-3
610820-35-4	610820-36-5	610820-37-6	610820-38-7	610820-39-8
610820-40-1	610820-41-2	610820-42-3	610820-43-4	610820-44-5
610820-45-6	610820-46-7	610820-47-8	610820-48-9	610820-49-0
610820-50-3	610820-51-4	610820-52-5	610820-53-6	610820-54-7
610820-55-8	610820-56-9	610820-57-0	610820-58-1	610820-59-2
610820-60-5	610820-61-6	610820-62-7	610820-63-8	610820-64-9
610820-65-0	610820-66-1	610820-67-2	610820-68-3	610820-69-4
610820-70-7	610820-71-8	610820-72-9	610820-73-0	610820-74-1
610820-75-2	610820-76-3	610820-77-4	610820-78-5	610820-79-6
610820-80-9	610820-81-0	610820-82-1	610820-83-2	610820-84-3
610820-85-4	610820-86-5	610820-87-6	610820-88-7	610820-89-8
610820-90-1	610820-91-2	610820-92-3	610820-93-4	610820-94-5
610820-95-6	610820-96-7	610820-97-8	610820-98-9	610820-99-0
610821-00-6	610821-01-7	610821-02-8	610821-03-9	610821-04-0
610821-05-1	610821-06-2	610821-07-3	610821-08-4	610821-09-5
610821-10-8	610821-11-9	610821-12-0	610821-13-1	610821-14-2

610821-15-3	610821-16-4	610821-17-5	610821-18-6	610821-19-7
610821-20-0	610821-21-1	610821-22-2	610821-23-3	610821-24-4
610821-25-5	610821-26-6	610821-27-7	610821-28-8	610821-29-9
610821-30-2	610821-31-3	610821-32-4	610821-33-5	610821-34-6
610821-35-7	610821-36-8	610821-37-9		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610821-38-0	610821-39-1	610821-40-4	610821-41-5	610821-42-6
	610821-43-7	610821-44-8	610821-45-9	610821-46-0	610821-47-1
	610821-48-2	610821-49-3	610821-50-6	610821-51-7	610821-52-8
	610821-53-9	610821-54-0	610821-55-1	610821-56-2	610821-57-3
	610821-58-4	610821-59-5	610821-60-8	610821-61-9	610821-62-0
	610821-63-1	610821-64-2	610821-65-3	610821-66-4	610821-67-5
	610821-68-6	610821-69-7	610821-70-0	610821-71-1	610821-72-2
	610821-73-3	610821-74-4	610821-75-5	610821-76-6	610821-77-7
	610821-78-8	610821-79-9	610821-80-2	610821-81-3	610821-82-4
	610821-83-5	610821-84-6	610821-85-7	610821-86-8	610821-87-9
	610821-88-0	610821-89-1	610821-90-4	610821-91-5	610821-92-6
	610821-93-7	610821-94-8	610821-95-9	610821-96-0	610821-97-1
	610821-98-2	610821-99-3	610822-00-9	610822-01-0	610822-02-1
	610822-03-2	610822-04-3	610822-05-4	610822-06-5	610822-07-6
	610822-08-7	610822-09-8	610822-10-1	610822-11-2	610822-12-3
	610822-13-4	610822-14-5	610822-15-6	610822-16-7	610822-17-8
	610822-18-9	610822-19-0	610822-20-3	610822-21-4	610822-22-5
	610822-23-6	610822-24-7	610822-25-8	610822-26-9	610822-27-0
	610822-28-1	610822-29-2	610822-30-5	610822-31-6	610822-32-7
	610822-33-8	610822-34-9	610822-35-0	610822-36-1	610822-37-2
	610822-38-3	610822-39-4	610822-40-7	610822-41-8	610822-42-9
	610822-43-0	610822-44-1	610822-45-2	610822-46-3	610822-47-4
	610822-48-5	610822-49-6	610822-50-9	610822-51-0	610822-52-1
	610822-53-2	610822-54-3	610822-55-4	610822-56-5	610822-57-6
	610822-58-7	610822-59-8	610822-60-1	610822-61-2	610822-62-3
	610822-63-4	610822-64-5	610822-65-6	610822-66-7	610822-67-8
	610822-68-9	610822-69-0	610822-70-3	610822-71-4	610822-72-5
	610822-73-6	610822-74-7	610822-75-8	610822-76-9	610822-77-0
	610822-78-1	610822-79-2	610822-80-5	610822-81-6	610822-82-7
	610822-83-8	610822-84-9	610822-85-0	610822-86-1	610822-87-2
	610822-88-3	610822-89-4	610822-90-7	610822-91-8	610822-92-9
	610822-93-0	610822-94-1	610822-95-2	610822-96-3	610822-97-4
	610822-98-5	610822-99-6	610823-00-2	610823-01-3	610823-02-4
	610823-03-5	610823-04-6	610823-05-7	610823-06-8	610823-07-9
	610823-08-0	610823-09-1	610823-10-4	610823-11-5	610823-12-6
	610823-13-7	610823-14-8	610823-15-9	610823-16-0	610823-17-1
	610823-18-2	610823-19-3	610823-20-6	610823-21-7	610823-22-8
	610823-23-9	610823-24-0	610823-25-1	610823-26-2	610823-27-3
	610823-28-4	610823-29-5	610823-30-8	610823-31-9	610823-32-0
	610823-33-1	610823-34-2	610823-35-3	610823-36-4	610823-37-5
	610823-38-6	610823-39-7	610823-40-0	610823-41-1	610823-42-2
	610823-43-3	610823-44-4	610823-45-5	610823-46-6	610823-47-7
	610823-48-8	610823-49-9	610823-50-2	610823-51-3	610823-52-4
	610823-53-5	610823-54-6	610823-55-7	610823-56-8	610823-57-9
	610823-58-0	610823-59-1	610823-60-4	610823-61-5	610823-62-6
	610823-63-7	610823-64-8	610823-65-9	610823-66-0	610823-67-1
	610823-68-2	610823-69-3	610823-70-6		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610823-71-7	610823-72-8	610823-73-9	610823-74-0	610823-75-1
	610823-76-2	610823-77-3	610823-78-4	610823-79-5	610823-80-8
	610823-81-9	610823-82-0	610823-83-1	610823-84-2	610823-85-3
	610823-86-4	610823-87-5	610823-88-6	610823-89-7	610823-90-0

610823-91-1	610823-92-2	610823-93-3	610823-94-4	610823-95-5
610823-96-6	610823-97-7	610823-98-8	610823-99-9	610824-00-5
610824-01-6	610824-02-7	610824-03-8	610824-04-9	610824-05-0
610824-06-1	610824-07-2	610824-08-3	610824-09-4	610824-10-7
610824-11-8	610824-12-9	610824-13-0	610824-14-1	610824-15-2
610824-16-3	610824-17-4	610824-18-5	610824-19-6	610824-20-9
610824-21-0	610824-22-1	610824-23-2	610824-24-3	610824-25-4
610824-26-5	610824-27-6	610824-28-7	610824-29-8	610824-30-1
610824-31-2	610824-32-3	610824-33-4	610824-34-5	610824-35-6
610824-36-7	610824-37-8	610824-38-9	610824-39-0	610824-40-3
610824-41-4	610824-42-5	610824-43-6	610824-44-7	610824-45-8
610824-46-9	610824-47-0	610824-48-1	610824-49-2	610824-50-5
610824-51-6	610824-52-7	610824-53-8	610824-54-9	610824-55-0
610824-56-1	610824-57-2	610824-58-3	610824-59-4	610824-60-7
610824-61-8	610824-62-9	610824-63-0	610824-64-1	610824-65-2
610824-66-3	610824-67-4	610824-68-5	610824-69-6	610824-70-9
610824-71-0	610824-72-1	610824-73-2	610824-74-3	610824-75-4
610824-76-5	610824-77-6	610824-78-7	610824-79-8	610824-80-1
610824-81-2	610824-82-3	610824-83-4	610824-84-5	610824-85-6
610824-86-7	610824-87-8	610824-88-9	610824-89-0	610824-90-3
610824-91-4	610824-92-5	610824-93-6	610824-94-7	610824-95-8
610824-96-9	610824-97-0	610824-98-1	610824-99-2	610825-00-8
610825-01-9	610825-02-0	610825-03-1	610825-04-2	610825-05-3
610825-06-4	610825-07-5	610825-08-6	610825-09-7	610825-10-0
610825-11-1	610825-12-2	610825-13-3	610825-14-4	610825-15-5
610825-16-6	610825-17-7	610825-18-8	610825-19-9	610825-20-2
610825-21-3	610825-22-4	610825-23-5	610825-24-6	610825-25-7
610825-26-8	610825-27-9	610825-28-0	610825-29-1	610825-30-4
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610825-36-0	610825-37-1	610825-38-2	610825-39-3	610825-40-6
610825-41-7	610825-42-8	610825-43-9	610825-44-0	610825-45-1
610825-46-2	610825-47-3	610825-48-4	610825-49-5	610825-50-8
610825-51-9	610825-52-0	610825-53-1	610825-54-2	610825-55-3
610825-56-4	610825-57-5	610825-58-6	610825-59-7	610825-60-0
610825-61-1	610825-62-2	610825-63-3	610825-64-4	610825-65-5
610825-66-6	610825-67-7	610825-68-8	610825-69-9	610825-70-2
610825-71-3	610825-72-4	610825-73-5	610825-74-6	610825-75-7
610825-76-8	610825-77-9	610825-78-0	610825-79-1	610825-80-4
610825-81-5	610825-82-6	610825-83-7	610825-84-8	610825-85-9
610825-86-0	610825-87-1	610825-88-2	610825-89-3	610825-90-6
610825-91-7	610825-92-8	610825-93-9	610825-94-0	610825-95-1
610825-96-2	610825-97-3	610825-98-4	610825-99-5	610826-00-1
610826-01-2	610826-02-3	610826-03-4		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610826-04-5	610826-05-6	610826-06-7	610826-07-8	610826-08-9
	610826-09-0	610826-10-3	610826-11-4	610826-12-5	610826-13-6
	610826-14-7	610826-15-8	610826-16-9	610826-17-0	610826-18-1
	610826-19-2	610826-20-5	610826-21-6	610826-22-7	610826-23-8
	610826-24-9	610826-25-0	610826-26-1	610826-27-2	610826-28-3
	610826-29-4	610826-30-7	610826-31-8	610826-32-9	610826-33-0
	610826-34-1	610826-35-2	610826-36-3	610826-37-4	610826-38-5
	610826-39-6	610826-40-9	610826-41-0	610826-42-1	610826-43-2
	610826-44-3	610826-45-4	610826-46-5	610826-47-6	610826-48-7
	610826-49-8	610826-50-1	610826-51-2	610826-52-3	610826-53-4
	610826-54-5	610826-55-6	610826-56-7	610826-57-8	610826-58-9
	610826-59-0	610826-60-3	610826-61-4	610826-62-5	610826-63-6
	610826-64-7	610826-65-8	610826-66-9	610826-67-0	610826-68-1
	610826-69-2	610826-70-5	610826-71-6	610826-72-7	610826-73-8
	610826-74-9	610826-75-0	610826-76-1	610826-77-2	610826-78-3
	610826-79-4	610826-80-7	610826-81-8	610826-82-9	610826-83-0
	610826-84-1	610826-85-2	610826-86-3	610826-87-4	610826-88-5
	610826-89-6	610826-90-9	610826-91-0	610826-92-1	610826-93-2

610826-94-3	610826-95-4	610826-96-5	610826-97-6	610826-98-7
610826-99-8	610827-00-4	610827-01-5	610827-02-6	610827-03-7
610827-04-8	610827-05-9	610827-06-0	610827-07-1	610827-08-2
610827-09-3	610827-10-6	610827-11-7	610827-12-8	610827-13-9
610827-14-0	610827-15-1	610827-16-2	610827-17-3	610827-18-4
610827-19-5	610827-20-8	610827-21-9	610827-22-0	610827-23-1
610827-24-2	610827-25-3	610827-26-4	610827-27-5	610827-28-6
610827-29-7	610827-30-0	610827-31-1	610827-32-2	610827-33-3
610827-34-4	610827-35-5	610827-36-6	610827-37-7	610827-38-8
610827-39-9	610827-40-2	610827-41-3	610827-42-4	610827-43-5
610827-44-6	610827-45-7	610827-46-8	610827-47-9	610827-48-0
610827-49-1	610827-50-4	610827-51-5	610827-52-6	610827-53-7
610827-54-8	610827-55-9	610827-56-0	610827-57-1	610827-58-2
610827-59-3	610827-60-6	610827-61-7	610827-62-8	610827-63-9
610827-64-0	610827-65-1	610827-66-2	610827-67-3	610827-68-4
610827-69-5	610827-70-8	610827-71-9	610827-72-0	610827-73-1
610827-74-2	610827-75-3	610827-76-4	610827-77-5	610827-78-6
610827-79-7	610827-80-0	610827-81-1	610827-82-2	610827-83-3
610827-84-4	610827-85-5	610827-86-6	610827-87-7	610827-88-8
610827-89-9	610827-90-2	610827-91-3	610827-92-4	610827-93-5
610827-94-6	610827-95-7	610827-96-8	610827-97-9	610827-98-0
610827-99-1	610828-00-7	610828-01-8	610828-02-9	610828-03-0
610828-04-1	610828-05-2	610828-06-3	610828-07-4	610828-08-5
610828-09-6	610828-10-9	610828-11-0	610828-12-1	610828-13-2
610828-14-3	610828-15-4	610828-16-5	610828-17-6	610828-18-7
610828-19-8	610828-20-1	610828-21-2	610828-22-3	610828-23-4
610828-24-5	610828-25-6	610828-26-7	610828-27-8	610828-28-9
610828-29-0	610828-30-3	610828-31-4	610828-32-5	610828-33-6
610828-34-7	610828-35-8	610828-36-9		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT 610828-37-0	610828-38-1	610828-39-2	610828-40-5	610828-41-6
610828-42-7	610828-43-8	610828-44-9	610828-45-0	610828-46-1
610828-47-2	610828-48-3	610828-49-4	610828-50-7	610828-51-8
610828-52-9	610828-53-0	610828-54-1	610828-55-2	610828-56-3
610828-57-4	610828-58-5	610828-59-6	610828-60-9	610828-61-0
610828-62-1	610828-63-2	610828-64-3	610828-65-4	610828-66-5
610828-67-6	610828-68-7	610828-69-8	610828-70-1	610828-71-2
610828-72-3	610828-73-4	610828-74-5	610828-75-6	610828-76-7
610828-77-8	610828-78-9	610828-79-0	610828-80-3	610828-81-4
610828-82-5	610828-83-6	610828-84-7	610828-85-8	610828-86-9
610828-87-0	610828-88-1	610828-89-2	610828-90-5	610828-91-6
610828-92-7	610828-93-8	610828-94-9	610828-95-0	610828-96-1
610828-97-2	610828-98-3	610828-99-4	610829-00-0	610829-01-1
610829-02-2	610829-03-3	610829-04-4	610829-05-5	610829-06-6
610829-07-7	610829-08-8	610829-09-9	610829-10-2	610829-11-3
610829-12-4	610829-13-5	610829-14-6	610829-15-7	610829-16-8
610829-17-9	610829-18-0	610829-19-1	610829-20-4	610829-21-5
610829-22-6	610829-23-7	610829-24-8	610829-25-9	610829-26-0
610829-27-1	610829-28-2	610829-29-3	610829-30-6	610829-31-7
610829-32-8	610829-33-9	610829-34-0	610829-35-1	610829-36-2
610829-37-3	610829-38-4	610829-39-5	610829-40-8	610829-41-9
610829-42-0	610829-43-1	610829-44-2	610829-45-3	610829-46-4
610829-47-5	610829-48-6	610829-49-7	610829-50-0	610829-51-1
610829-52-2	610829-53-3	610829-54-4	610829-55-5	610829-56-6
610829-57-7	610829-58-8	610829-59-9	610829-60-2	610829-61-3
610829-62-4	610829-63-5	610829-64-6	610829-65-7	610829-66-8
610829-67-9	610829-68-0	610829-69-1	610829-70-4	610829-71-5
610829-72-6	610829-73-7	610829-74-8	610829-75-9	610829-76-0
610829-77-1	610829-78-2	610829-79-3	610829-80-6	610829-81-7
610829-82-8	610829-83-9	610829-84-0	610829-85-1	610829-86-2
610829-87-3	610829-88-4	610829-89-5	610829-90-8	610829-91-9
610829-92-0	610829-93-1	610829-94-2	610829-95-3	610829-96-4

610829-97-5	610829-98-6	610829-99-7	610830-00-7	610830-01-8
610830-02-9	610830-03-0	610830-04-1	610830-05-2	610830-06-3
610830-07-4	610830-08-5	610830-09-6	610830-10-9	610830-11-0
610830-12-1	610830-13-2	610830-14-3	610830-15-4	610830-16-5
610830-17-6	610830-18-7	610830-19-8	610830-20-1	610830-21-2
610830-22-3	610830-23-4	610830-24-5	610830-25-6	610830-26-7
610830-27-8	610830-28-9	610830-29-0	610830-30-3	610830-31-4
610830-32-5	610830-33-6	610830-34-7	610830-35-8	610830-36-9
610830-37-0	610830-38-1	610830-39-2	610830-40-5	610830-41-6
610830-42-7	610830-43-8	610830-44-9	610830-45-0	610830-46-1
610830-47-2	610830-48-3	610830-49-4	610830-50-7	610830-51-8
610830-52-9	610830-53-0	610830-54-1	610830-55-2	610830-56-3
610830-57-4	610830-58-5	610830-59-6	610830-60-9	610830-61-0
610830-62-1	610830-63-2	610830-64-3	610830-65-4	610830-66-5
610830-67-6	610830-68-7	610830-69-8		

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT 610830-70-1	610830-71-2	610830-72-3	610830-73-4	610830-74-5
610830-75-6	610830-76-7	610830-77-8	610830-78-9	610830-79-0
610830-80-3	610830-81-4	610830-82-5	610830-83-6	610830-84-7
610830-85-8	610830-86-9	610830-87-0	610830-88-1	610830-89-2
610830-90-5	610830-91-6	610830-92-7	610830-93-8	610830-94-9
610830-95-0	610830-96-1	610830-97-2	610830-98-3	610830-99-4
610831-00-0	610831-01-1	610831-02-2	610831-03-3	610831-04-4
610831-05-5	610831-06-6	610831-07-7	610831-08-8	610831-09-9
610831-10-2	610831-11-3	610831-12-4	610831-13-5	610831-14-6
610831-15-7	610831-16-8	610831-17-9	610831-18-0	610831-19-1
610831-20-4	610831-21-5	610831-22-6	610831-23-7	610831-24-8
610831-25-9	610831-26-0	610831-27-1	610831-28-2	610831-29-3
610831-30-6	610831-31-7	610831-32-8	610831-33-9	610831-34-0
610831-35-1	610831-36-2	610831-37-3	610831-38-4	610831-39-5
610831-40-8	610831-41-9	610831-42-0	610831-43-1	610831-44-2
610831-45-3	610831-46-4	610831-47-5	610831-48-6	610831-49-7
610831-50-0	610831-51-1	610831-52-2	610831-53-3	610831-54-4
610831-55-5	610831-56-6	610831-57-7	610831-58-8	610831-59-9
610831-60-2	610831-61-3	610831-62-4	610831-63-5	610831-64-6
610831-65-7	610831-66-8	610831-67-9	610831-68-0	610831-69-1
610831-70-4	610831-71-5	610831-72-6	610831-73-7	610831-74-8
610831-75-9	610831-76-0	610831-77-1	610831-78-2	610831-79-3
610831-80-6	610831-81-7	610831-82-8	610831-83-9	610831-84-0
610831-85-1	610831-86-2	610831-87-3	610831-88-4	610831-89-5
610831-90-8	610831-91-9	610831-92-0	610831-93-1	610831-94-2
610831-95-3	610831-96-4	610831-97-5	610831-98-6	610831-99-7
610832-00-3	610832-01-4	610832-02-5	610832-03-6	610832-04-7
610832-05-8	610832-06-9	610832-07-0	610832-08-1	610832-09-2
610832-10-5	610832-11-6	610832-12-7	610832-13-8	610832-14-9
610832-15-0	610832-16-1	610832-17-2	610832-18-3	610832-19-4
610832-20-7	610832-21-8	610832-22-9	610832-23-0	610832-24-1
610832-25-2	610832-26-3	610832-27-4	610832-28-5	610832-29-6
610832-30-9	610832-31-0	610832-32-1	610832-33-2	610832-34-3
610832-35-4	610832-36-5	610832-37-6	610832-38-7	610832-39-8
610832-40-1	610832-41-2	610832-42-3	610832-43-4	610832-44-5
610832-45-6	610832-46-7	610832-47-8	610832-48-9	610832-49-0
610832-50-3	610832-51-4	610832-52-5	610832-53-6	610832-54-7
610832-55-8	610832-56-9	610832-57-0	610832-58-1	610832-59-2
610832-60-5	610832-61-6	610832-62-7	610832-63-8	610832-64-9
610832-65-0	610832-66-1	610832-67-2	610832-68-3	610832-69-4
610832-70-7	610832-71-8	610832-72-9	610832-73-0	610832-74-1
610832-75-2	610832-76-3	610832-77-4	610832-78-5	610832-79-6
610832-80-9	610832-81-0	610832-82-1	610832-83-2	610832-84-3
610832-85-4	610832-86-5	610832-87-6	610832-88-7	610832-89-8
610832-90-1	610832-91-2	610832-92-3	610832-93-4	610832-94-5
610832-95-6	610832-96-7	610832-97-8	610832-98-9	610832-99-0

610833-00-6 610833-01-7 610833-02-8
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610833-03-9	610833-04-0	610833-05-1	610833-06-2	610833-07-3
	610833-08-4	610833-09-5	610833-10-8	610833-11-9	610833-12-0
	610833-13-1	610833-14-2	610833-15-3	610833-16-4	610833-17-5
	610833-18-6	610833-19-7	610833-20-0	610833-21-1	610833-22-2
	610833-23-3	610833-24-4	610833-25-5	610833-26-6	610833-27-7
	610833-28-8	610833-29-9	610833-30-2	610833-31-3	610833-32-4
	610833-33-5	610833-34-6	610833-35-7	610833-36-8	610833-37-9
	610833-38-0	610833-39-1	610833-40-4	610833-41-5	610833-42-6
	610833-43-7	610833-44-8	610833-45-9	610833-46-0	610833-47-1
	610833-48-2	610833-49-3	610833-50-6	610833-51-7	610833-52-8
	610833-53-9	610833-54-0	610833-55-1	610833-56-2	610833-57-3
	610833-58-4	610833-59-5	610833-60-8	610833-61-9	610833-62-0
	610833-63-1	610833-64-2	610833-65-3	610833-66-4	610833-67-5
	610833-68-6	610833-69-7	610833-70-0	610833-71-1	610833-72-2
	610833-73-3	610833-74-4	610833-75-5	610833-76-6	610833-77-7
	610833-78-8	610833-79-9	610833-80-2	610833-81-3	610833-82-4
	610833-83-5	610833-84-6	610833-85-7	610833-86-8	610833-87-9
	610833-88-0	610833-89-1	610833-90-4	610833-91-5	610833-92-6
	610833-93-7	610833-94-8	610833-95-9	610833-96-0	610833-97-1
	610833-98-2	610833-99-3	610834-00-9	610834-01-0	610834-02-1
	610834-03-2	610834-04-3	610834-05-4	610834-06-5	610834-07-6
	610834-08-7	610834-09-8	610834-10-1	610834-11-2	610834-12-3
	610834-13-4	610834-14-5	610834-15-6	610834-16-7	610834-17-8
	610834-18-9	610834-19-0	610834-20-3	610834-21-4	610834-22-5
	610834-23-6	610834-24-7	610834-25-8	610834-26-9	610834-27-0
	610834-28-1	610834-29-2	610834-30-5	610834-31-6	610834-32-7
	610834-33-8	610834-34-9	610834-35-0	610834-36-1	610834-37-2
	610834-38-3	610834-39-4	610834-40-7	610834-41-8	610834-42-9
	610834-43-0	610834-44-1	610834-45-2	610834-46-3	610834-47-4
	610834-48-5	610834-49-6	610834-50-9	610834-51-0	610834-52-1
	610834-53-2	610834-54-3	610834-55-4	610834-56-5	610834-57-6
	610834-58-7	610834-59-8	610834-60-1	610834-61-2	610834-62-3
	610834-63-4	610834-64-5	610834-65-6	610834-66-7	610834-67-8
	610834-68-9	610834-69-0	610834-70-3	610834-71-4	610834-72-5
	610834-73-6	610834-74-7	610834-75-8	610834-76-9	610834-77-0
	610834-78-1	610834-79-2	610834-80-5	610834-81-6	610834-82-7
	610834-83-8	610834-84-9	610834-85-0	610834-86-1	610834-87-2
	610834-88-3	610834-89-4	610834-90-7	610834-91-8	610834-92-9
	610834-93-0	610834-94-1	610834-95-2	610834-96-3	610834-97-4
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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT	610837-69-9	610837-70-2	610837-71-3	610837-72-4	610837-73-5
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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

IT 610776-60-8

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human tissues)

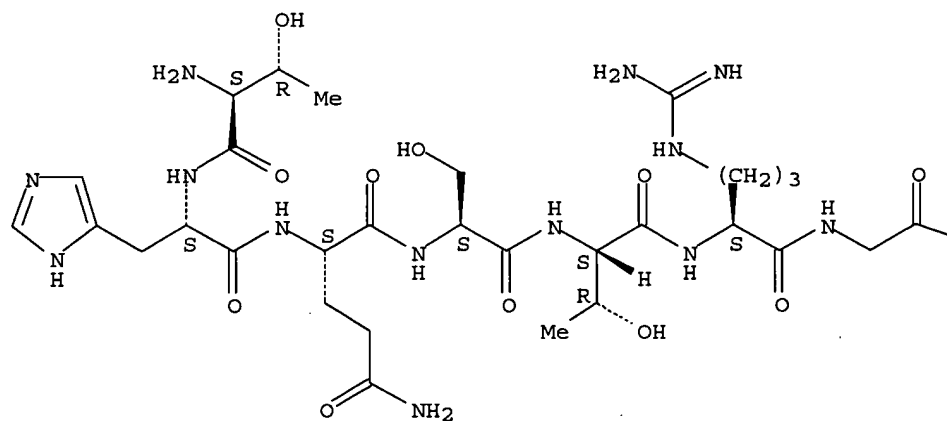
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CN L-Valine, L-threonyl-L-histidyl-L-glutaminyl-L-seryl-L-threonyl-L-
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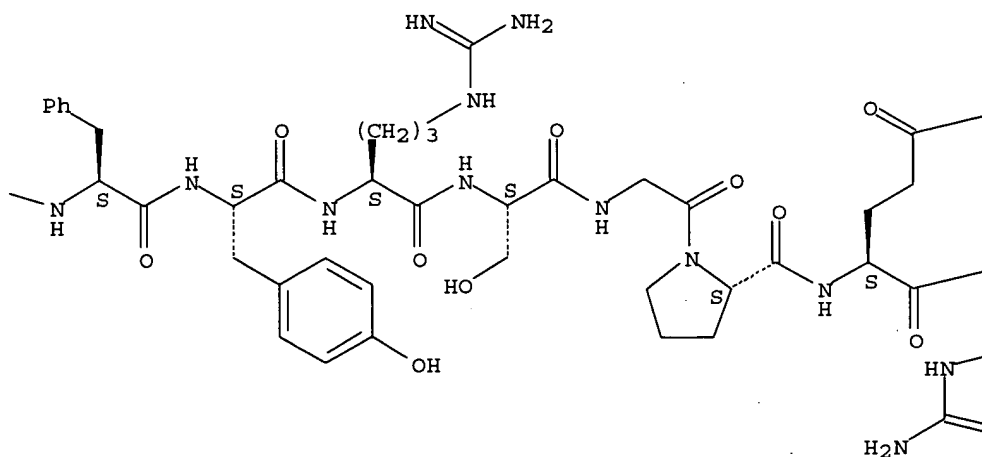
alanyl-L- α -aspartyl-L-leucyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

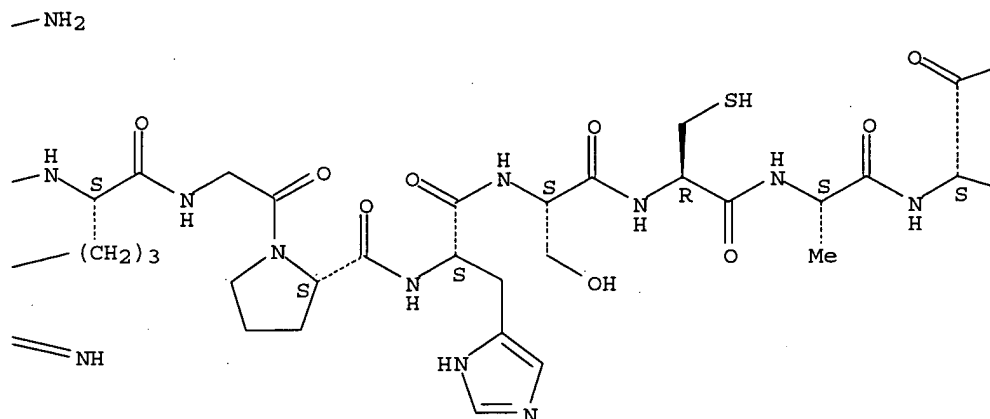
PAGE 1-A



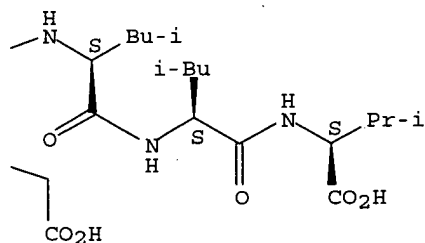
PAGE 1-B



PAGE 1-C



PAGE 1-D



L24 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:719271 HCAPLUS
 DN 139:265740
 ED Entered STN: 14 Sep 2003
 TI KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy
 IN Sato, Aaron K.; Sexton, Daniel J.; Ladner, Robert C.; Dransfield, Daniel
 T.; Swenson, Rolf E.; Marinelli, Edmund R.; Ramalingam, Kondareddiar;
 Nunn, Adrian D.; Von Wronski, Mathew A.; Shrivastava, Ajay; Pochon,
 Sibylle; Bussat, Philippe; Arbogast, Christophe; Pillai, Radhakrishna;
 Fan, Hong; Linder, Karen E.; Song, Bo; Nanjappan, Palaniappa
 PA Dyax Corp., USA; Bracco International B.V.; et al.
 SO PCT Int. Appl., 350 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K
 CC 63-5 (Pharmaceuticals)

Search done by Noble Jarrell

Section cross-reference(s): 1, 8, 9

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003074005	A2	20030912	WO 2003-US6731	20030303 <--
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PRAI	US 2002-360851P	P	20020301	<--	
	US 2003-440411P	P	20030115		
	US 2003-382082	A2	20030303		
	WO 2003-US6731	W	20030303		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003074005	ICM	A61K
WO 2003074005	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71 <--
WO 2004065621	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71 <--
US 2005100963	NCL	435/007.100; 514/009.000; 530/317.000
	ECLA	A61K049/22P4; A61K051/08Z; C07K007/08A; C07K014/00B; C07K014/52; C07K014/71 <--

OS MARPAT 139:265740

AB The present invention relates to polypeptides useful for detecting and targeting primary receptors on endothelial cells for VEGF, i.e., VEGF receptor 2, also known as kinase domain region (KDR) and fetal liver kinase-1 (Flk-1), and for imaging and targeting complexes formed by VEGF and KDR. The involvement of VEGF and KDR in angiogenesis makes the VEGF/KDR and KDR binding polypeptides of the present invention particularly useful for imaging important sites of angiogenesis, e. g., neoplastic tumors, for targeting substances, e.g., therapeutics, including radiotherapeutics, to such sites, and for treating certain disease states, including those associated with inappropriate angiogenesis. Disclosed are synthetic, isolated polypeptides capable of binding KDR or VEGF/KDR complex with high affinity (e.g., having a $KD < 1 \mu M$).

ST kinase domain region VEGF targeting peptide diagnosis therapy; imaging radiotherapy tumor VEGF receptor target

IT AIDS (disease)
 Anti-AIDS agents
 Antimalarials
 Antitumor agents
 Antiviral agents
 Chelating agents
 Diagnosis
 Drug targets

Fluorescent indicators
 Imaging agents
 Malaria
 Phage display library
 Radiopharmaceuticals
 Radiotherapy
 Scintigraphic agents
 Simian hemorrhagic fever virus
 (KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Vascular endothelial growth factor receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Perfluorocarbons
 RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
 (KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Imaging agents
 (NMR contrast; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Imaging agents
 (acoustic; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Hydrocarbons, biological studies
 RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
 (chlorofluorocarbons; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Dyes
 (conjugates, as imaging agents; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Avidins
 RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (conjugates; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Radiology
 (diagnostic; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Escherichia coli
 (enterohemorrhagic, infection; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Hydrocarbons, biological studies
 RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
 (fluoro, ultrasound contrast agents; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Paramagnetic materials
 (imaging agents; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Drug delivery systems
 (liposomes; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Bubbles
 (microbubbles, ultrasound contrast agents; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT Peptides, biological studies
 RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (radiolabeled conjugates; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT 597586-24-8P
 RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (589KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)
 IT 127464-60-2, Vascular endothelial growth factor 150977-45-0, Kdr

receptor tyrosine kinase

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

IT 75-63-8, Bromotrifluoromethane 75-71-8, Dichlorodifluoromethane
75-73-0, Tetrafluoromethane 76-15-3 76-16-4, Hexafluoroethane
76-19-7, Octafluoropropane 353-59-3, Bromochlorodifluoromethane
355-25-9, Decafluorobutane

RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

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RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

IT	599210-44-3P	599210-45-4P	599210-46-5P	599210-47-6P	599210-48-7P
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RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

IT 58-85-5D, Biotin, conjugates 60-00-4D, EDTA, conjugates 67-43-6D, DTPA, conjugates 869-52-3D, TTHA, conjugates 1170-02-1D, conjugates 1939-36-2D, conjugates 9013-20-1D, Streptavidin, conjugates 10043-49-9D, Gold 198, compds., biological studies 10043-66-0D, Iodine 131, compds., biological studies 10098-91-6D, Yttrium 90, compds., biological studies 13967-64-1D, Dysprosium 165, compds., biological studies 13967-65-2D, Holmium 166, compds., biological studies 13967-74-3D, Cerium 141, compds., biological studies 13968-53-1D, Ruthenium 103, compds., biological studies 13981-25-4D, Copper 64, compds., biological studies 13981-28-7D, Lanthanum 140, compds., biological studies 13981-56-1D, Fluorine 18, compds., biological studies 13982-36-0D, Yttrium 88, compds., biological studies 14041-44-2D, Ytterbium 175, compds., biological studies 14119-09-6D, Gallium 67, compds., biological studies 14158-30-6D, Iodine 124, compds., biological studies 14158-31-7D, Iodine 125, compds., biological studies 14265-75-9D, Lutetium 177, compds., biological studies 14276-53-0D, Copper 62, compds., biological studies 14378-26-8D, Rhenium 188, compds., biological studies 14391-11-8D, Gold 199, compds., biological studies 14391-19-6D, Terbium 161, compds., biological studies 14391-22-1D, Thulium 167, compds., biological studies 14391-96-9D, Scandium 47, compds., biological studies 14392-02-0D, Chromium 51, compds., biological studies 14687-25-3D, Lead 203, compds., biological

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 14733-03-0D, Bismuth 214, compds., biological studies 14913-49-6D,
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 15758-35-7D, Ruthenium 97, compds., biological studies 15765-31-8D,
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 compds., biological studies 15765-39-6D, Bromine 77, compds., biological
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 15776-20-2D, Bismuth 213, compds., biological studies 15840-01-4D,
 Dysprosium 166, compds., biological studies 16065-83-1D, Chromium
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 22537-59-3D, Protactinium ion(4+), compds., biological studies
 22541-14-6D, Praseodymium ion(3+), compds., biological studies
 22541-17-9D, Samarium ion(3+), compds., biological studies 22541-18-0D,
 Europium ion(3+), compds., biological studies 22541-19-1D, Gadolinium
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 22541-22-6D, Holmium ion(3+), compds., biological studies 22541-53-3D,
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 69146-59-4D, MECAM, conjugates 71353-07-6D, conjugates 104162-48-3D,
 DOTMA, conjugates 149440-35-7D, DO3A, conjugates 157885-16-0D,
 Neutravidin, conjugates 325126-08-7D, conjugates
 RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)

(KDR and VEGF/KDR binding peptides and their use in diagnosis and
 therapy)

IT 1190-93-8, S-Acetylthioglycolic acid 76931-93-6 79642-50-5

599211-93-5D, resin-bound 599211-94-6D, resin-bound

RL: RCT (Reactant); RACT (Reactant or reagent)

(KDR and VEGF/KDR binding peptides and their use in diagnosis and
 therapy)

IT 599211-96-8DP, resin-bound 599211-97-9DP, resin-bound 599211-98-ODP,
 resin-bound 600120-58-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(KDR and VEGF/KDR binding peptides and their use in diagnosis and
 therapy)

IT 13981-59-4D, Tin 117, compds., biological studies 14133-76-7D,

Technetium 99, compds., biological studies

RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(metastable; KDR and VEGF/KDR binding peptides and their use in
 diagnosis and therapy)

IT 600184-43-8

RL: PRP (Properties)

(unclaimed protein sequence; kDR and VEGF/KDR binding peptides and
 their use in diagnosis and therapy)

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600134-20-1				

RL: PRP (Properties)

(unclaimed sequence; KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

IT 599210-01-2P

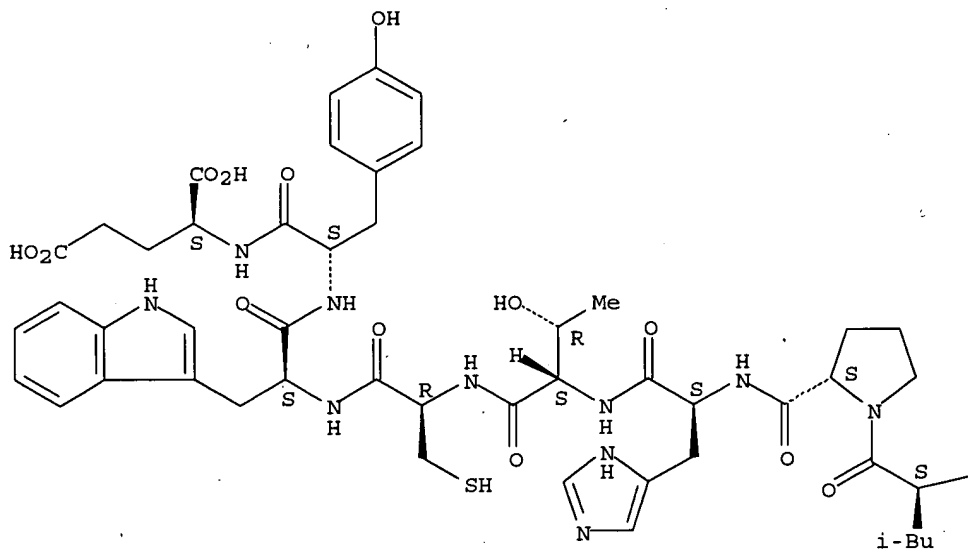
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy)

RN 599210-01-2 HCAPLUS

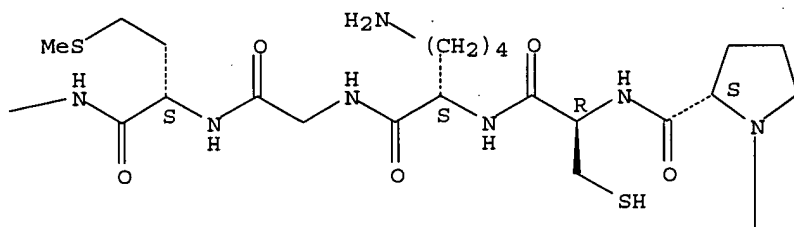
CN L-Glutamic acid, glycyl-L-histidyl-L-prolyl-L-cysteinyl-L-lysylglycyl-L-methionyl-L-leucyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyl-L-tryptophyl-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

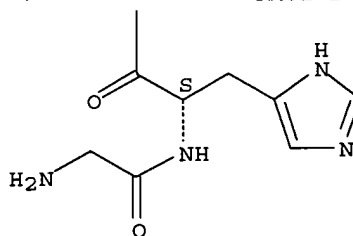
PAGE 1-A



PAGE 1-B



PAGE 2-B



L24 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:221865 HCAPLUS
 DN 138:250714
 ED Entered STN: 21 Mar 2003
 TI Selection and production of laccase- and other phenol oxidizing
 enzyme-binding peptide complexes for detergents and carotenoid stain
 removal
 IN Aehle, Wolfgang; Baldwin, Toby L.; Janssen, Giselle G.; Murray,
 Christopher J.; Van Gastel, Franciscus J. C.; Wang, Huaming; Winetzky,
 Deborah S.
 PA Genencor International, Inc., USA
 SO PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C12S009-00
 CC 7-3 (Enzymes)

Section cross-reference(s): 3, 16, 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003023067	A1	20030320	WO 2002-US27993	20020903 <--
	WO 2003023067	C2	20040521		

Search done by Noble Jarrell

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003100467 A1 20030529 US 2001-954385 20010912 <--
 US 2005042684 A1 20050224 US 2004-912512 20040805 <--

PRAI US 2001-954385 A 20010912 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003023067	ICM	C12S009-00
WO 2003023067	ECLA	C11D003/386H; C12N009/02H3B2 <--
US 2003100467	NCL	510/392.000; 510/530.000; 435/183.000
	ECLA	C11D003/386H; C12N009/02H3B2 <--
US 2005042684	NCL	435/007.100; 435/069.100; 435/189.000; 435/320.100; 435/325.000; 530/388.260; 536/023.200
	ECLA	C11D003/386H; C12N009/02H3B2 <--
AB	The present application relates to peptides which bind to a target stain, phenol oxidizing enzyme-binding peptide complexes wherein the binding peptide is attached to the C-terminus of the phenol oxidizing enzyme or is inserted or substituted into the phenol oxidizing enzyme. In a preferred embodiment the phenol oxidizing enzyme is a laccase, specifically Stachybotrys phenol oxidase B and variants thereof. The invention provides expression vectors comprising the phenol oxidizing enzyme-binding peptide complex as well as host cells comprising the vectors. The phenol oxidizing enzyme-binding peptide complex may be used in enzymic compns., particularly detergent compns. to specifically target stains and particularly to carotenoid compound stains. The invention pertain to a method of using a binding peptide to target a stain on a textile.	
ST	phenol oxidizing enzyme peptide complex detergent carotenoid stain removal; laccase peptide complex detergent carotenoid stain removal; Stachybotrys phenol oxidase B peptide complex detergent carotenoid stain	
IT	Protein sequences (Stachybotrys phenol oxidase B; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Aspergillus niger (cloning host; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Detergents (enzyme-containing; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Genetic vectors (for enzyme-peptide complexes; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Molecular cloning (of enzyme-peptide complexes; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Repeat motifs (protein) (of peptide; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	
IT	Molecular association (peptide-enzyme and peptide-carotenoid; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)	

- IT Stachybotrys
(phenol oxidase B; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Enzymes, biological studies
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); CAT (Catalyst use); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phenol oxidizing; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Fermentation
(protein, of enzyme-peptide complexes; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Bleaching
Bleaching agents
Coloring materials
Genetic engineering
Phage display library
Stains, biological
Surfactants
(selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Peptides, biological studies
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Carotenes, biological studies
RL: BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Detergents
(stain removers; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT Lycopersicon esculentum
Textiles
(stain; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT 9002-10-2P, Phenol oxidase
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); CAT (Catalyst use); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(B; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT 502774-31-4DP, variants are claimed
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); CAT (Catalyst use); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
- IT 52-90-4, L-Cysteine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(peptide containing; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

IT 19285-44-0 21866-90-0 56395-09-6 120706-99-2 128209-68-7
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(protein motif; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

IT 80498-15-3P, Laccase

RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); CAT (Catalyst use); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)

(selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

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RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

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 502168-98-1P 502169-01-9P

RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

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 502783-55-3

RL: PRP (Properties)

(unclaimed nucleotide sequence; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

IT 502697-64-5 502697-65-6

RL: PRP (Properties)

(unclaimed sequence; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Wang; US 6168936 B1 2001 HCAPLUS

IT 502169-28-0

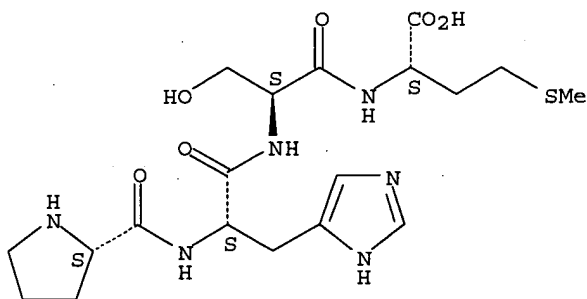
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(protein motif; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

RN 502169-28-0 HCAPLUS

CN L-Methionine, L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



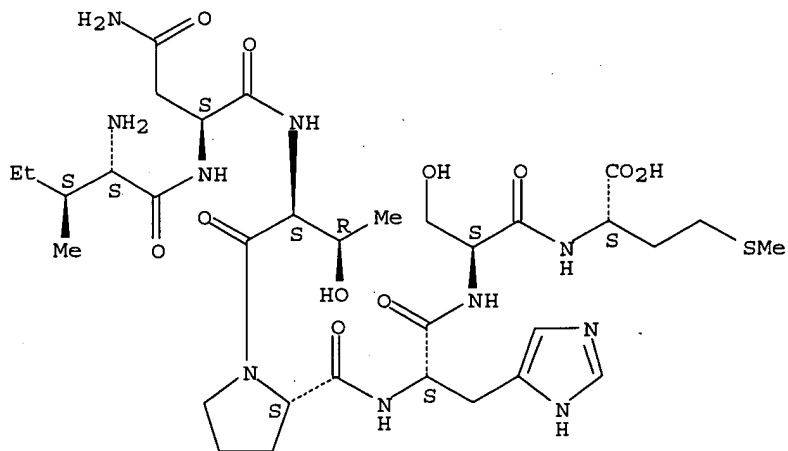
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RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

RN 502166-83-8 HCAPLUS

CN L-Methionine, L-isoleucyl-L-asparaginyl-L-threonyl-L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

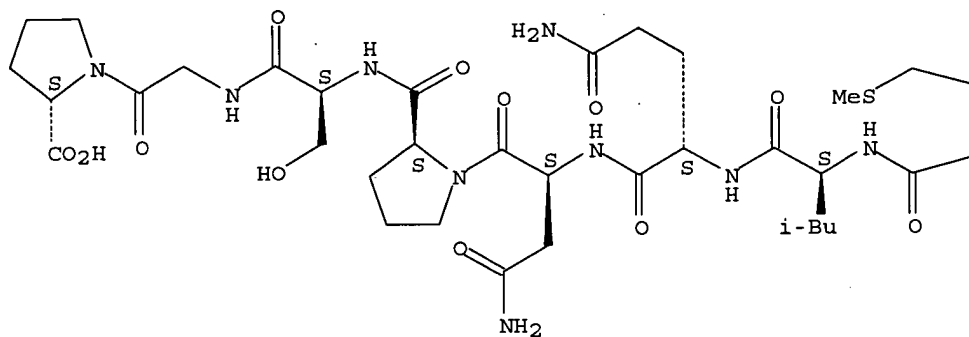


RN 502167-78-4 HCAPLUS

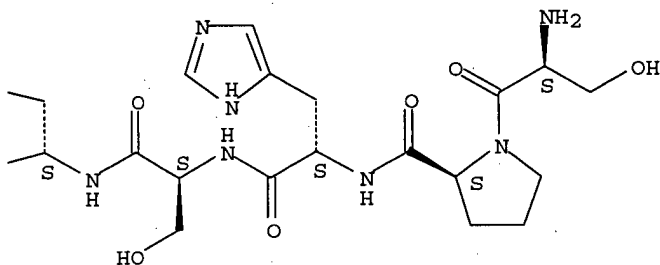
CN L-Proline, L-seryl-L-prolyl-L-histidyl-L-seryl-L-methionyl-L-leucyl-L-glutaminy-L-asparaginy-L-prolyl-L-serylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A.



PAGE 1-B

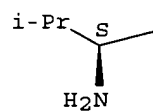
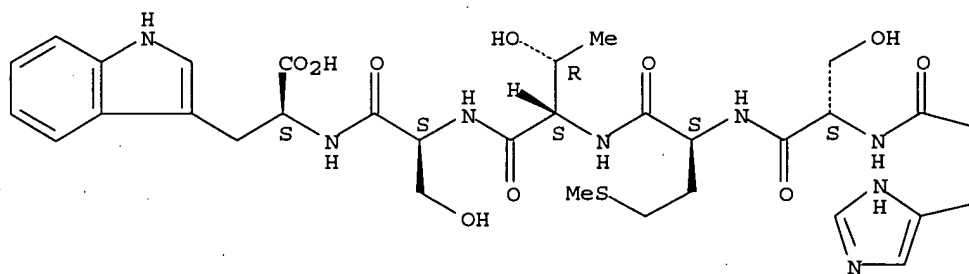


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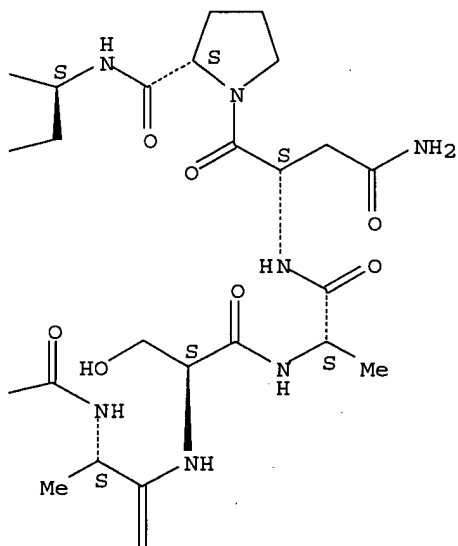
CN L-Tryptophan, L-valyl-L-alanyl-L-seryl-L-alanyl-L-asparaginy-L-prolyl-L-histidyl-L-seryl-L-methionyl-L-threonyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-B



L24 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:889383 HCAPLUS
 DN 137:381699
 ED Entered STN: 22 Nov 2002

Search done by Noble Jarrell

TI Crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications

IN Rose, David Richard; Kuntz, Douglas Arthur; Van Den Elsen, Jean Maria Hubertus

PA Can.

SO U.S. Pat. Appl. Publ., 429 pp.
CODEN: USXXCO

DT Patent

LA English

IC ICM C12N009-24
ICS A61K038-47; G06F019-00; G01N033-48; G01N033-50

INCL 424094610; 435200000; 702019000

CC 7-5 (Enzymes)

Section cross-reference(s): 1, 9, 63, 75

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002172670	A1	20021121	US 2001-960226	20010921 <--
	CA 2357526	AA	20020322	CA 2001-2357526	20010921 <--
PRAI	US 2000-234879P	P	20000922	<--	
	US 2001-263458P	P	20010123	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002172670	ICM	C12N009-24
	ICS	A61K038-47; G06F019-00; G01N033-48; G01N033-50
	INCL	424094610; 435200000; 702019000
US 2002172670	NCL	424/094.610; 435/200.000; 702/019.000
	ECLA	C12Q001/34; G01N033/68A <--

AB The present invention relates to a crystal comprising a mannosidase II ligand-binding domain. In particular the present invention relates to a crystal comprising Drosophila Golgi α -mannosidase II (EC 3.2.1.114) (with and without swainsonine), and its use to generate models for elucidating the structure of other polypeptides and for better identifying ligands capable of modulating mannosidase II activity. These ligands may have therapeutic and prophylactic potential.

ST Drosophila mannosidase II swainsonine crystal structure ligand therapeutic

IT Protein motifs

(Ig-like domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

IT Oligosaccharides, biological studies

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(active site bound; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

IT Enzyme functional sites

(active; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

IT Crystal growth

DNA sequences

Disulfide group

Drosophila

Drug screening

Molecular modeling

Protein motifs

Protein sequences

α -Helix

β -Sheet

(crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

IT Ligands

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

- IT Information systems
(data, crystal structure data storage and mol. modeling; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Protein motifs
(glycosylation site; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Enzyme functional sites
(ligand-binding; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Drugs
(ligand-containing; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Golgi apparatus
(mannosidase II from; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Disease, animal
(mannosidase II-associated; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Enzyme functional sites
(metal-binding, zinc-binding; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Crystal structure
Molecular structure
(of Drosophila α -mannosidase II and swainsonine complexes)
- IT Molecular association
(of ligand with mannosidase II; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Molecular cloning
(of mannosidase II; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Coordination sphere
(of zinc ion; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Plasmid vectors
(pCopBlast, mannosidase II cloning; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Secondary structure
Tertiary structure
(protein, determination of secondary and tertiary structures using mannosidase II crystal structure; crystal structure of Drosophila α -mannosidase II and swainsonine complexes)
- IT Conformation
(protein; crystal structure of Drosophila α -mannosidase II and

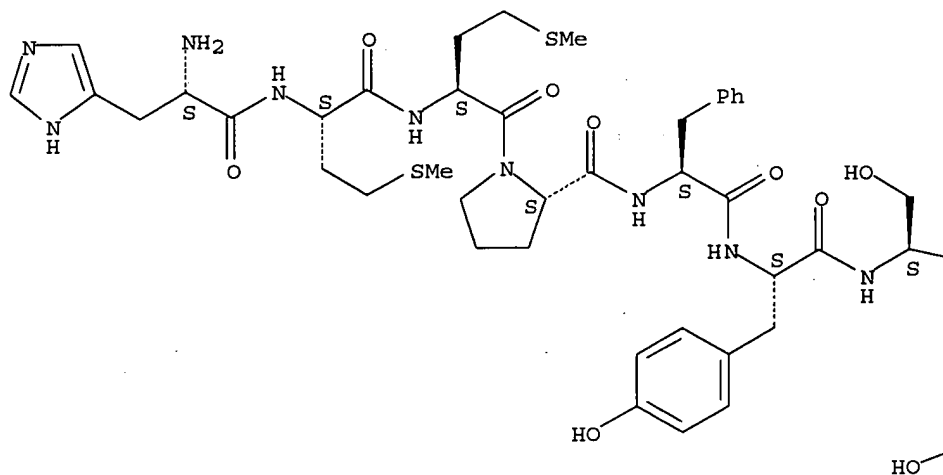
- swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Information systems
(storage, crystal structure data storage and mol. modeling; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Computer application
(to crystal structure data storage and mol. modeling; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Mammalia
(treatment of disease of; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT Conformation
(β -strand; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 70-47-3, L-Asparagine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-194, N-glycosylation site; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 63-91-2, L-Phenylalanine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-206, ligand-binding domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 60-18-4, L-Tyrosine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-269, -727, ligand-binding domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 52-90-4, L-Cysteine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-31 and -1032, -275 and 282, -283 and -297, disulfide bond; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 56-84-8, L-Aspartic acid, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(-90, -92, -204, -341, -472, ligand-binding domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 71-00-1, L-Histidine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-90, -92, -471, ligand-binding domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 73-22-3, L-Tryptophan, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-95, ligand-binding domain; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 77-86-1, Tris
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

- (Biological study)
(active site bound; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 476217-06-8P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 7512-17-6, N-Acetyl-D-glucosamine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(at N-glycosylation site; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 7440-66-6, Zinc, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(at mannosidase II active site; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 72741-87-8DP, Swainsonine, α -mannosidase II complexes
82047-77-6DP, α -Mannosidase II, swainsonine complexes
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 82047-77-6P, α -Mannosidase II
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 476217-05-7P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 475502-53-5 475502-54-6 475502-57-9 476173-05-4
476173-06-5
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(protein motif; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- IT 476173-05-4
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(protein motif; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
- RN 476173-05-4 HCAPLUS
CN L-Arginine, L-histidyl-L-methionyl-L-methionyl-L-prolyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-tyrosyl-L- α -aspartyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinylglycyl-L-prolyl-L- α -aspartyl-L-prolyl-L-lysyl-L-valyl-L-isoleucyl-L-cysteinyl-L-glutamyl-L-phenylalanyl-L- α -

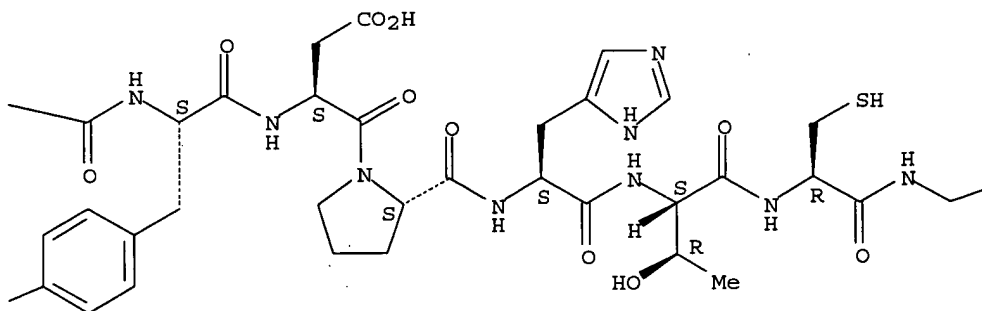
aspartyl-L-phenylalanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

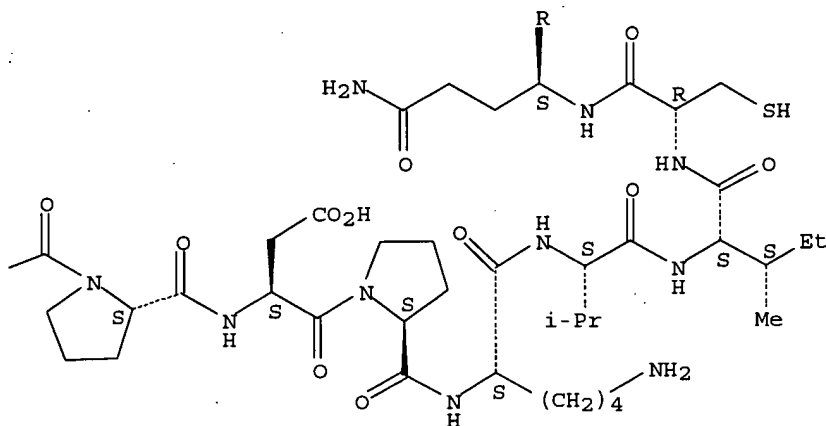
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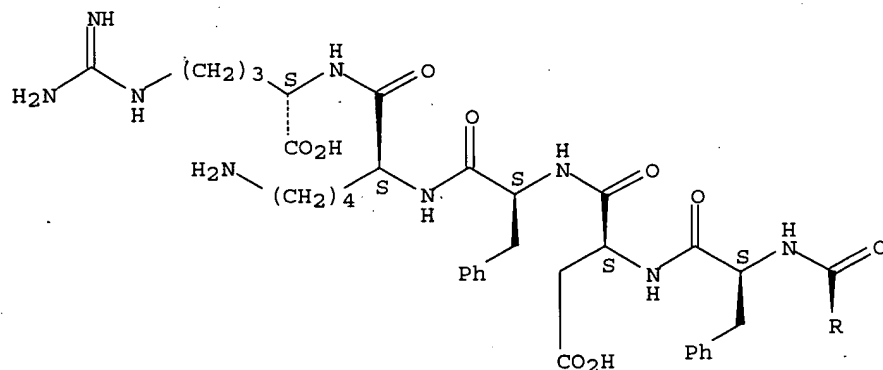
PAGE 1-B



PAGE 1-C



PAGE 2-A



L24 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:857442 HCAPLUS
 DN 137:321377
 ED Entered STN: 12 Nov 2002
 TI Human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers
 IN Jakobovits, Aya; Challita-Eid, Pia M.; Faris, Mary; Ge, Wangmao; Hubert, Rene S.; Morrison, Karen; Morrison, Robert Kendall; Raitano, Arthur B.
 PA Agensys, Inc., USA
 SO PCT Int. Appl., 1021 pp.
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 DT Patent
 LA English
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 CC 3-3 (Biochemical Genetics)
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083921	A2	20021024	WO 2002-XB11654	20020410 <--

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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 WO 2002083921 A2 20021024 WO 2002-US11654 20020410 <--
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 US 2003207835 A1 20031106 US 2002-280340 20021025 <--
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 US 2001-283112P P 20010410 <--
 US 2001-286630P P 20010425 <--
 WO 2002-US11654 A 20020410 <--
 US 2000-227098P P 20000822 <--
 US 2001-935430 A1 20010822 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002083921	IC	C12Q
US 2003199470	NCL	514/044.000; 514/012.000; 424/155.100; 435/006.000; 435/007.230 <--
US 2003207835	NCL	514/044.000; 424/146.100; 435/006.000; 435/007.230 <--
AB		Eighteen genes and their resp. encoded proteins, and variants thereof, are described wherein the gene exhibits restricted expression in normal adult tissue and is overexpressed in various cancers. Suppression subtractive hybridization (SSH) is used to identify cDNAs corresponding to genes that are differentially expressed in cancer; PCR amplification, cloning, and sequencing of gene fragments from SSH yield the full-length cDNAs. Consequently, the gene products provide diagnostic, prognostic, prophylactic, and/or therapeutic targets for cancer. The genes or fragment thereof, their encoded proteins, or variants or fragments thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with the gene products can be used in active or passive immunization. [This abstract record is one of 16 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]
ST		protein gene sequence human cancer diagnosis therapy; cDNA protein sequence human cancer diagnosis therapy
IT		Gene, animal Gene, animal RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
IT		Gene, animal RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (109P1D4, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
IT		Gene, animal RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

- (151P1C7A, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(151P4E11, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(154P2A8, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(156P1D4, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(156P5C12, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(159P2B5, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(161P2B7A, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(179P3G7, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(184P3C10B, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(184P3G10, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(185P2C9, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

- (185P3C2, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(186P1H9, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(187P3F2, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(192P2G7, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(74P3B3, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(83P4B8, malignant tissue-specific expresssion and chromosome mapping of; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-A1, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-A2, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-A24, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-A3, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-B7, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-DR3, epitopes; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT PCR (polymerase chain reaction)
(RT-PCR (reverse transcription-PCR), diagnostic assay; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Diagnosis
(agents, conjugates with antibodies; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Hybridoma

- (antibody production by; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Diagnosis
Diagnosis
(cancer; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Intestine, neoplasm
(colon; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Cytotoxic agents
(conjugates with antibodies; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(conjugates, with cytotoxic agents or diagnostic reagents; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT T cell (lymphocyte)
(cytotoxic, specific for tumor-restricted proteins; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Immunoassay
(diagnostic; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fragments; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fusion products; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Genetic methods
(gene discovery; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT T cell (lymphocyte)
(helper cell, specific for tumor-restricted proteins; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antitumor agents
Bladder, neoplasm
Epitopes
Gene therapy
Genetic mapping
Human
Kidney, neoplasm
Kidney, neoplasm
Lung, neoplasm
Mammary gland, neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Population genetics
Prostate gland, neoplasm
Protein sequences
Tumor markers
cDNA sequences
(human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Tumor antigens
Tumor antigens
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Primers (nucleic acid)
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Chromosome
(human, gene mapping on; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(humanized; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Secondary structure
(of tumor-restricted proteins; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Plasmid vectors
(polyepitopic; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(single chain; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Ribozymes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(specific for tumor-restricted protein mRNA; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT B cell (lymphocyte)
T cell (lymphocyte)
(specific for tumor-restricted proteins; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Animal
(transgenic; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(tumor-associated, 109P1D4; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(tumor-associated, 151P1C7A; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(tumor-associated, 151P4E11; human nucleic acids and corresponding

proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 154P2A8; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 156P1D4; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 156P5C12; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 159P2B5; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 161P2B7A; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 179P3G7; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 184P3C10B; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 185P2C9; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 185P3C2; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 186P1H9; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 187P3F2; human nucleic acids and corresponding proteins

useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 18P3G10; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 192P2G7; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 74P3B3; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (tumor-associated, 83P4B8; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Vaccines
 (tumor; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT Antitumor agents
 (vaccines; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT 112747-70-3, 1-15-Galanin (cattle) 473453-66-6 473453-67-7

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RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473599-38-1	473599-39-2	473599-40-5	473599-41-6	473599-42-7
	473599-43-8	473599-44-9	473599-45-0	473599-46-1	473599-47-2
	473599-48-3	473599-49-4	473599-50-7	473599-51-8	473599-52-9
	473599-53-0	473599-54-1	473599-55-2	473599-56-3	473599-57-4
	473599-58-5	473599-59-6	473599-60-9	473599-61-0	473599-62-1
	473599-63-2	473599-64-3	473599-65-4	473599-66-5	473599-67-6
	473599-68-7	473599-69-8	473599-70-1	473599-71-2	473599-72-3
	473599-73-4	473599-74-5	473599-75-6	473599-76-7	473599-77-8
	473599-78-9	473599-79-0	473599-80-3	473599-81-4	473599-82-5
	473599-83-6	473599-84-7	473599-85-8	473599-86-9	473599-87-0
	473599-88-1	473599-89-2	473599-90-5	473599-91-6	473599-93-8
	473599-95-0	473599-97-2	473599-99-4	473600-02-1	473600-04-3
	473600-06-5	473600-08-7	473600-09-8	473600-10-1	473600-11-2
	473600-12-3	473600-13-4	473600-14-5	473600-15-6	473600-16-7
	473600-17-8	473600-18-9	473600-19-0	473600-20-3	473600-21-4
	473600-22-5	473600-24-7	473600-26-9	473600-27-0	473600-29-2
	473600-31-6	473600-33-8	473600-35-0	473600-37-2	473600-38-3
	473600-40-7	473600-42-9	473600-44-1	473600-46-3	473600-48-5
	473600-50-9	473600-52-1	473600-53-2	473600-55-4	473600-57-6
	473600-59-8	473600-61-2	473600-62-3	473600-63-4	473600-64-5
	473600-66-7	473600-70-3	473600-72-5	473600-74-7	473600-76-9
	473600-78-1	473600-80-5	473600-82-7	473600-84-9	473600-86-1
	473600-88-3	473600-89-4	473600-91-8	473600-93-0	473600-95-2
	473600-97-4	473600-99-6	473601-01-3	473601-03-5	473601-05-7
	473601-07-9	473601-09-1	473601-11-5	473601-13-7	473601-15-9
	473601-17-1	473601-19-3	473601-21-7	473601-23-9	473601-25-1
	473601-27-3	473601-29-5	473601-31-9	473601-33-1	473601-36-4
	473601-37-5	473601-39-7	473601-41-1	473601-46-6	473601-50-2
	473601-53-5	473601-55-7	473601-56-8	473601-58-0	473601-60-4
	473601-62-6	473601-64-8	473601-66-0	473601-68-2	473601-70-6
	473601-72-8	473601-74-0	473601-76-2	473601-78-4	473601-80-8
	473601-82-0	473601-84-2	473601-86-4	473601-88-6	473601-89-7
	473601-91-1	473601-93-3	473601-95-5	473601-97-7	473601-99-9
	473602-01-6	473602-03-8	473602-05-0	473602-07-2	473602-09-4
	473602-11-8	473602-13-0	473602-15-2	473602-17-4	473602-19-6
	473602-21-0	473602-23-2	473602-25-4	473602-27-6	473602-29-8
	473602-31-2	473602-33-4	473602-35-6	473602-37-8	473602-39-0
	473602-41-4	473602-43-6	473602-45-8	473602-47-0	473602-49-2
	473602-51-6	473602-53-8	473602-55-0	473602-56-1	473602-58-3
	473602-60-7	473602-62-9	473602-64-1	473602-66-3	473602-68-5
	473602-70-9	473602-72-1	473602-74-3	473602-76-5	473602-78-7
	473602-80-1	473602-82-3	473602-84-5	473602-86-7	473602-88-9
	473602-90-3	473602-91-4	473602-93-6	473602-95-8	473602-97-0
	473602-99-2	473603-01-9	473603-03-1	473603-05-3	473603-07-5
	473603-09-7	473603-11-1	473603-13-3	473603-15-5	473603-17-7
	473603-19-9	473603-21-3	473603-23-5	473603-25-7	473603-27-9
	473603-29-1	473603-31-5			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study);

BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful
in the detection and treatment of various cancers)

IT	473603-33-7	473603-35-9	473603-36-0	473603-38-2	473603-40-6
	473603-42-8	473603-44-0	473603-46-2	473603-48-4	473603-50-8
	473603-52-0	473603-54-2	473603-56-4	473603-58-6	473603-60-0
	473603-62-2	473603-64-4	473603-66-6	473603-68-8	473603-70-2
	473603-72-4	473603-74-6	473603-76-8	473603-78-0	473603-80-4
	473603-81-5	473603-83-7	473603-85-9	473603-87-1	473603-88-2
	473603-90-6	473603-92-8	473603-94-0	473603-96-2	473603-98-4
	473604-01-2	473604-03-4	473604-05-6	473604-07-8	473604-09-0
	473604-11-4	473604-12-5	473604-20-5	473604-22-7	473604-24-9
	473604-26-1	473604-28-3	473604-29-4	473604-31-8	473604-33-0
	473604-35-2	473604-37-4	473604-39-6	473604-41-0	473604-43-2
	473604-45-4	473604-47-6	473604-49-8	473604-51-2	473604-53-4
	473604-55-6	473604-57-8	473604-59-0	473604-62-5	473604-64-7
	473604-66-9	473604-68-1	473604-70-5	473604-72-7	473604-74-9
	473604-76-1	473604-78-3	473604-80-7	473604-82-9	473604-85-2
	473604-87-4	473604-88-5	473604-89-6	473604-90-9	473604-92-1
	473604-94-3	473604-96-5	473604-98-7	473605-00-4	473605-02-6
	473605-04-8	473605-06-0	473605-08-2	473605-10-6	473605-14-0
	473605-16-2	473605-19-5	473605-21-9	473605-23-1	473605-25-3
	473605-27-5	473605-29-7	473605-32-2	473605-35-5	473605-38-8
	473605-40-2	473605-42-4	473605-44-6	473605-46-8	473605-48-0
	473605-50-4	473605-52-6	473605-54-8	473605-56-0	473605-58-2
	473605-60-6	473605-62-8	473605-64-0	473605-66-2	473605-68-4
	473605-70-8	473605-73-1	473605-75-3	473605-77-5	473605-79-7
	473605-81-1	473605-83-3	473605-85-5	473605-88-8	473605-92-4
	473605-97-9	473605-99-1	473606-01-8	473606-03-0	473606-05-2
	473606-07-4	473606-09-6	473606-11-0	473606-13-2	473606-15-4
	473606-17-6	473606-19-8	473606-21-2	473606-23-4	473606-25-6
	473606-27-8	473606-29-0	473606-31-4	473606-33-6	473606-35-8
	473606-37-0	473606-39-2	473606-42-7	473606-44-9	473606-46-1
	473606-48-3	473606-54-1	473606-56-3	473606-59-6	473606-62-1
	473606-68-7	473606-71-2	473606-73-4	473606-77-8	473606-79-0
	473606-82-5	473606-88-1	473606-94-9	473606-98-3	473607-02-2
	473607-04-4	473607-08-8	473607-12-4	473607-15-7	473607-19-1
	473607-23-7	473607-32-8	473607-33-9	473607-35-1	473607-43-1
	473607-48-6	473607-49-7	473607-51-1	473607-55-5	473607-58-8
	473607-60-2	473607-64-6	473607-68-0	473607-76-0	473607-79-3
	473607-81-7	473607-88-4	473607-93-1	473607-95-3	473607-98-6
	473607-99-7	473608-01-4	473608-06-9	473608-08-1	473608-10-5
	473608-13-8	473608-18-3	473608-20-7	473608-22-9	473608-25-2
	473608-28-5	473608-30-9	473608-32-1	473608-37-6	473608-39-8
	473608-44-5	473608-45-6	473608-46-7	473608-47-8	473608-49-0
	473608-54-7	473608-56-9	473608-58-1	473608-62-7	473608-68-3
	473608-70-7	473608-73-0	473608-75-2	473608-78-5	473608-80-9
	473608-82-1	473608-86-5	473608-90-1	473608-91-2	473608-96-7
	473608-98-9	473609-01-7	473609-03-9	473609-05-1	473609-08-4
	473609-09-5	473609-10-8			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study);
BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful
in the detection and treatment of various cancers)

IT	473609-11-9	473609-12-0	473609-13-1	473609-14-2	473609-15-3
	473609-16-4	473609-17-5	473609-18-6	473609-19-7	473609-20-0
	473609-21-1	473609-22-2	473609-23-3	473609-24-4	473609-25-5
	473609-26-6	473609-27-7	473609-28-8	473609-29-9	473609-30-2
	473609-31-3	473609-32-4	473609-33-5	473609-34-6	473609-35-7
	473609-36-8	473609-37-9	473609-38-0	473609-39-1	473609-40-4
	473609-41-5	473609-42-6	473609-43-7	473609-44-8	473609-45-9
	473609-46-0	473609-47-1	473609-48-2	473609-49-3	473609-50-6
	473609-51-7	473609-52-8	473609-53-9	473609-54-0	473609-55-1
	473609-56-2	473609-57-3	473609-58-4	473609-59-5	473609-60-8
	473609-61-9	473609-62-0	473609-63-1	473609-64-2	473609-65-3

473609-66-4	473609-67-5	473609-68-6	473609-69-7	473609-70-0
473609-71-1	473609-72-2	473609-73-3	473609-74-4	473609-75-5
473609-76-6	473609-77-7	473609-78-8	473609-79-9	473609-80-2
473609-81-3	473609-82-4	473609-83-5	473609-84-6	473609-85-7
473609-86-8	473609-87-9	473609-89-1	473609-90-4	473609-91-5
473609-92-6	473609-93-7	473609-94-8	473609-95-9	473609-96-0
473609-97-1	473609-98-2	473609-99-3	473610-00-3	473610-01-4
473610-02-5	473610-03-6	473610-04-7	473610-05-8	473610-09-2
473610-13-8	473610-15-0	473610-17-2	473610-18-3	473610-21-8
473610-24-1	473610-26-3	473610-29-6	473610-31-0	473610-34-3
473610-36-5	473610-39-8	473610-41-2	473610-43-4	473610-44-5
473610-47-8	473610-49-0	473610-51-4	473610-57-0	473610-59-2
473610-61-6	473610-63-8	473610-65-0	473610-68-3	473610-70-7
473610-71-8	473610-73-0	473610-76-3	473610-78-5	473610-81-0
473610-83-2	473610-85-4	473610-87-6	473610-89-8	473610-92-3
473610-94-5	473610-95-6	473610-96-7	473610-97-8	473610-98-9
473610-99-0	473611-00-6	473611-01-7	473611-02-8	473611-03-9
473611-04-0	473611-06-2	473611-07-3	473611-08-4	473611-10-8
473611-11-9	473611-12-0	473611-13-1	473611-14-2	473611-15-3
473611-16-4	473611-17-5	473611-18-6	473611-19-7	473611-20-0
473611-21-1	473611-22-2	473611-26-6	473611-28-8	473611-31-3
473611-33-5	473611-36-8	473611-38-0	473611-40-4	473611-49-3
473611-53-9	473611-55-1	473611-57-3	473611-62-0	473611-63-1
473611-64-2	473611-65-3	473611-66-4	473611-67-5	473611-68-6
473611-69-7	473611-70-0	473611-71-1	473611-72-2	473611-73-3
473611-74-4	473611-75-5	473611-76-6	473611-77-7	473611-78-8
473611-79-9	473611-80-2	473611-81-3	473611-82-4	473611-83-5
473611-84-6	473611-85-7	473611-86-8	473611-87-9	473611-88-0
473611-89-1	473611-90-4	473611-91-5	473611-92-6	473611-93-7
473611-94-8	473611-95-9	473611-96-0	473611-97-1	473611-98-2
473611-99-3	473612-00-9	473612-01-0	473612-02-1	473612-03-2
473612-04-3	473612-05-4	473612-06-5	473612-07-6	473612-08-7
473612-09-8	473612-10-1	473612-11-2	473612-12-3	473612-13-4
473612-14-5	473612-15-6	473612-16-7	473612-17-8	473612-18-9
473612-19-0	473612-20-3	473612-21-4	473612-22-5	473612-23-6
473612-24-7	473612-25-8			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473612-26-9	473612-27-0	473612-28-1	473612-29-2	473612-30-5
	473612-31-6	473612-32-7	473612-33-8	473612-34-9	473612-35-0
	473612-36-1	473612-37-2	473612-38-3	473612-39-4	473612-40-7
	473612-41-8	473612-42-9	473612-43-0	473612-44-1	473612-45-2
	473612-46-3	473612-47-4	473612-48-5	473612-49-6	473612-50-9
	473612-51-0	473612-52-1	473612-53-2	473612-54-3	473612-55-4
	473612-56-5	473612-57-6	473612-58-7	473612-59-8	473612-60-1
	473612-61-2	473612-62-3	473612-63-4	473612-64-5	473612-65-6
	473612-66-7	473612-67-8	473612-68-9	473612-69-0	473612-70-3
	473612-71-4	473612-72-5	473612-73-6	473612-74-7	473612-75-8
	473612-76-9	473612-77-0	473612-78-1	473612-79-2	473612-80-5
	473612-81-6	473612-82-7	473612-83-8	473612-84-9	473612-85-0
	473612-86-1	473612-87-2	473612-88-3	473612-89-4	473612-90-7
	473612-91-8	473612-92-9	473612-93-0	473612-94-1	473612-95-2
	473612-96-3	473612-97-4	473612-98-5	473612-99-6	473613-00-2
	473613-01-3	473613-02-4	473613-03-5	473613-04-6	473613-05-7
	473613-06-8	473613-07-9	473613-08-0	473613-09-1	473613-10-4
	473613-11-5	473613-12-6	473613-13-7	473613-14-8	473613-15-9
	473613-16-0	473613-17-1	473613-18-2	473613-19-3	473613-20-6
	473613-21-7	473613-22-8	473613-23-9	473613-24-0	473613-25-1
	473613-26-2	473613-27-3	473613-28-4	473613-29-5	473613-30-8
	473613-31-9	473613-32-0	473613-33-1	473613-34-2	473613-35-3
	473613-36-4	473613-37-5	473613-38-6	473613-39-7	473613-40-0
	473613-41-1	473613-42-2	473613-43-3	473613-44-4	473613-45-5
	473613-46-6	473613-47-7	473613-48-8	473613-49-9	473613-50-2

473613-51-3	473613-52-4	473613-53-5	473613-54-6	473613-55-7
473613-56-8	473613-57-9	473613-58-0	473613-59-1	473613-60-4
473613-61-5	473613-62-6	473613-63-7	473613-64-8	473613-65-9
473613-66-0	473613-67-1	473613-68-2	473613-69-3	473613-70-6
473613-71-7	473613-72-8	473613-73-9	473613-74-0	473613-75-1
473613-76-2	473613-77-3	473613-78-4	473613-79-5	473613-80-8
473613-81-9	473613-82-0	473613-83-1	473613-84-2	473613-85-3
473613-86-4	473613-87-5	473613-88-6	473613-89-7	473613-90-0
473613-91-1	473613-92-2	473613-93-3	473613-94-4	473613-95-5
473613-96-6	473613-97-7	473613-98-8	473613-99-9	473614-00-5
473614-01-6	473614-02-7	473614-03-8	473614-04-9	473614-05-0
473614-06-1	473614-07-2	473614-08-3	473614-09-4	473614-10-7
473614-11-8	473614-12-9	473614-13-0	473614-14-1	473614-15-2
473614-16-3	473614-17-4	473614-18-5	473614-19-6	473614-20-9
473614-21-0	473614-22-1	473614-23-2	473614-24-3	473614-25-4
473614-26-5	473614-27-6	473614-28-7	473614-29-8	473614-30-1
473614-31-2	473614-32-3	473614-33-4	473614-34-5	473614-35-6
473614-36-7	473614-37-8	473614-38-9	473614-39-0	473614-40-3
473614-41-4	473614-42-5	473614-43-6	473614-44-7	473614-45-8
473614-46-9	473614-47-0	473614-48-1	473614-49-2	473614-50-5
473614-51-6	473614-52-7	473614-53-8	473614-54-9	473614-55-0
473614-56-1	473614-57-2			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473614-58-3	473614-59-4	473614-60-7	473614-61-8	473614-62-9
	473614-63-0	473614-64-1	473614-65-2	473614-66-3	473614-67-4
	473614-68-5	473614-69-6	473614-70-9	473614-71-0	473614-72-1
	473614-73-2	473614-74-3	473614-75-4	473614-76-5	473614-77-6
	473614-78-7	473614-79-8	473614-80-1	473614-81-2	473614-82-3
	473614-83-4	473614-84-5	473614-85-6	473614-86-7	473614-87-8
	473614-88-9	473614-89-0	473614-90-3	473614-91-4	473614-92-5
	473614-93-6	473614-94-7	473614-95-8	473614-96-9	473614-97-0
	473614-98-1	473614-99-2	473615-00-8	473615-01-9	473615-02-0
	473615-03-1	473615-04-2	473615-05-3	473615-06-4	473615-07-5
	473615-08-6	473615-09-7	473615-10-0	473615-11-1	473615-12-2
	473615-13-3	473615-14-4	473615-15-5	473615-16-6	473615-17-7
	473615-18-8	473615-19-9	473615-20-2	473615-21-3	473615-22-4
	473615-23-5	473615-24-6	473615-25-7	473615-26-8	473615-27-9
	473615-28-0	473615-29-1	473615-30-4	473615-31-5	473615-32-6
	473615-33-7	473615-34-8	473615-35-9	473615-36-0	473615-37-1
	473615-38-2	473615-39-3	473615-40-6	473615-41-7	473615-42-8
	473615-43-9	473615-44-0	473615-45-1	473615-46-2	473615-47-3
	473615-48-4	473615-49-5	473615-50-8	473615-51-9	473615-52-0
	473615-53-1	473615-54-2	473615-55-3	473615-56-4	473615-57-5
	473615-58-6	473615-59-7	473615-60-0	473615-61-1	473615-62-2
	473615-63-3	473615-64-4	473615-65-5	473615-66-6	473615-67-7
	473615-68-8	473615-69-9	473615-70-2	473615-71-3	473615-72-4
	473615-73-5	473615-74-6	473615-75-7	473615-76-8	473615-77-9
	473615-78-0	473615-79-1	473615-80-4	473615-81-5	473615-82-6
	473615-83-7	473615-84-8	473615-85-9	473615-86-0	473615-87-1
	473615-88-2	473615-89-3	473615-90-6	473615-91-7	473615-92-8
	473615-93-9	473615-94-0	473615-95-1	473615-96-2	473615-97-3
	473615-98-4	473615-99-5	473616-00-1	473616-01-2	473616-02-3
	473616-03-4	473616-04-5	473616-05-6	473616-06-7	473616-07-8
	473616-08-9	473616-09-0	473616-10-3	473616-11-4	473616-12-5
	473616-13-6	473616-14-7	473616-15-8	473616-16-9	473616-17-0
	473616-18-1	473616-19-2	473616-20-5	473616-21-6	473616-22-7
	473616-23-8	473616-24-9	473616-25-0	473616-26-1	473616-27-2
	473616-28-3	473616-29-4	473616-30-7	473616-31-8	473616-32-9
	473616-33-0	473616-34-1	473616-35-2	473616-36-3	473616-37-4
	473616-38-5	473616-39-6	473616-40-9	473616-41-0	473616-42-1
	473616-43-2	473616-44-3	473616-45-4	473616-46-5	473616-47-6
	473616-48-7	473616-49-8	473616-50-1	473616-51-2	473616-52-3

473616-53-4	473616-54-5	473616-55-6	473616-56-7	473616-57-8
473616-58-9	473616-59-0	473616-60-3	473616-61-4	473616-62-5
473616-63-6	473616-64-7	473616-65-8	473616-66-9	473616-67-0
473616-68-1	473616-69-2	473616-70-5	473616-71-6	473616-72-7
473616-73-8	473616-74-9	473616-75-0	473616-76-1	473616-77-2
473616-78-3	473616-79-4	473616-80-7	473616-81-8	473616-82-9
473616-83-0	473616-84-1	473616-85-2	473616-86-3	473616-87-4
473616-88-5	473616-89-6			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473616-90-9	473616-91-0	473616-92-1	473616-93-2	473616-94-3
	473616-95-4	473616-96-5	473616-97-6	473616-98-7	473616-99-8
	473617-00-4	473617-01-5	473617-02-6	473617-03-7	473617-04-8
	473617-05-9	473617-06-0	473617-07-1	473617-08-2	473617-09-3
	473617-10-6	473617-11-7	473617-12-8	473617-13-9	473617-14-0
	473617-15-1	473617-16-2	473617-17-3	473617-18-4	473617-19-5
	473617-20-8	473617-21-9	473617-22-0	473617-23-1	473617-24-2
	473617-25-3	473617-26-4	473617-27-5	473617-28-6	473617-29-7
	473617-30-0	473617-31-1	473617-32-2	473617-33-3	473617-34-4
	473617-35-5	473617-40-2	473617-45-7	473617-46-8	473617-50-4
	473617-52-6	473617-53-7	473617-54-8	473617-56-0	473617-58-2
	473617-61-7	473617-65-1	473617-66-2	473617-67-3	473617-68-4
	473617-69-5	473617-70-8	473617-71-9	473617-72-0	473617-73-1
	473617-74-2	473617-75-3	473617-76-4	473617-77-5	473617-78-6
	473617-79-7	473617-80-0	473617-81-1	473617-82-2	473617-83-3
	473617-84-4	473617-85-5	473617-86-6	473617-87-7	473617-88-8
	473617-89-9	473617-90-2	473617-91-3	473617-92-4	473617-93-5
	473617-94-6	473617-95-7	473617-96-8	473617-97-9	473617-98-0
	473617-99-1	473618-00-7	473618-01-8	473618-02-9	473618-03-0
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	473618-09-6	473618-10-9	473618-11-0	473618-12-1	473618-13-2
	473618-14-3	473618-15-4	473618-16-5	473618-17-6	473618-18-7
	473618-19-8	473618-20-1	473618-21-2	473618-22-3	473618-23-4
	473618-24-5	473618-25-6	473618-26-7	473618-27-8	473618-28-9
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	473618-34-7	473618-35-8	473618-36-9	473618-37-0	473618-38-1
	473618-39-2	473618-40-5	473618-41-6	473618-42-7	473618-43-8
	473618-44-9	473618-45-0	473618-46-1	473618-47-2	473618-48-3
	473618-49-4	473618-50-7	473618-51-8	473618-52-9	473618-53-0
	473618-54-1	473618-55-2	473618-56-3	473618-57-4	473618-58-5
	473618-59-6	473618-60-9	473618-61-0	473618-62-1	473618-63-2
	473618-64-3	473618-65-4	473618-66-5	473618-67-6	473618-68-7
	473618-69-8	473618-70-1	473618-71-2	473618-72-3	473618-73-4
	473618-74-5	473618-75-6	473618-76-7	473618-77-8	473618-78-9
	473618-79-0	473618-80-3	473618-81-4	473618-82-5	473618-83-6
	473618-84-7	473618-85-8	473618-86-9	473618-87-0	473618-88-1
	473618-89-2	473618-90-5	473618-91-6	473618-92-7	473618-93-8
	473618-94-9	473618-95-0	473618-96-1	473618-97-2	473618-99-4
	473619-01-1	473619-02-2	473619-04-4	473619-06-6	473619-08-8
	473619-10-2	473619-12-4	473619-14-6	473619-16-8	473619-18-0
	473619-20-4	473619-22-6	473619-24-8	473619-26-0	473619-28-2
	473619-30-6	473619-32-8	473619-34-0	473619-36-2	473619-38-4
	473619-40-8	473619-42-0	473619-44-2	473619-46-4	473619-48-6
	473619-50-0	473619-54-4	473619-56-6	473619-58-8	473619-60-2
	473619-62-4	473619-64-6	473619-66-8	473619-68-0	473619-70-4
	473619-72-6	473619-74-8	473619-76-0	473619-78-2	473619-80-6
	473619-82-8	473619-84-0			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473619-86-2	473619-89-5	473619-91-9	473619-94-2	473620-00-7
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473620-08-5	473620-15-4	473620-22-3	473620-24-5	473620-27-8
473620-30-3	473620-34-7	473620-37-0	473620-39-2	473620-43-8
473620-46-1	473620-47-2	473620-48-3	473620-49-4	473620-51-8
473620-52-9	473620-54-1	473620-56-3	473620-57-4	473620-58-5
473620-59-6	473620-62-1	473620-63-2	473620-65-4	473620-66-5
473620-67-6	473620-68-7	473620-69-8	473620-70-1	473620-71-2
473620-72-3	473620-73-4	473620-74-5	473620-75-6	473620-76-7
473620-77-8	473620-78-9	473620-79-0	473620-80-3	473620-90-5
473620-91-6	473620-92-7	473620-93-8	473620-94-9	473620-95-0
473620-96-1	473620-97-2	473620-98-3	473620-99-4	473621-00-0
473621-01-1	473621-02-2	473621-03-3	473621-04-4	473621-05-5
473621-06-6	473621-07-7	473621-08-8	473621-09-9	473621-10-2
473621-11-3	473621-12-4	473621-13-5	473621-14-6	473621-15-7
473621-16-8	473621-17-9	473621-18-0	473621-19-1	473621-20-4
473621-21-5	473621-22-6	473621-23-7	473621-24-8	473621-25-9
473621-26-0	473621-27-1	473621-28-2	473621-29-3	473621-30-6
473621-31-7	473621-32-8	473621-33-9	473621-34-0	473621-35-1
473621-36-2	473621-37-3	473621-38-4	473621-39-5	473621-40-8
473621-41-9	473621-42-0	473621-43-1	473621-44-2	473621-45-3
473621-46-4	473621-47-5	473621-48-6	473621-49-7	473621-50-0
473621-51-1	473621-52-2	473621-53-3	473621-54-4	473621-55-5
473621-56-6	473621-57-7	473621-58-8	473621-59-9	473621-60-2
473621-61-3	473621-62-4	473621-63-5	473621-64-6	473621-65-7
473621-66-8	473621-67-9	473621-68-0	473621-69-1	473621-70-4
473621-71-5	473621-72-6	473621-73-7	473621-74-8	473621-75-9
473621-76-0	473621-77-1	473621-78-2	473621-79-3	473621-80-6
473621-81-7	473621-82-8	473621-83-9	473621-84-0	473621-85-1
473621-86-2	473621-87-3	473621-88-4	473621-89-5	473621-90-8
473621-91-9	473621-92-0	473621-93-1	473621-94-2	473621-95-3
473621-96-4	473621-97-5	473621-98-6	473621-99-7	473622-00-3
473622-01-4	473622-02-5	473622-03-6	473622-04-7	473622-05-8
473622-06-9	473622-07-0	473622-08-1	473622-09-2	473622-10-5
473622-11-6	473622-12-7	473622-13-8	473622-14-9	473622-15-0
473622-16-1	473622-17-2	473622-18-3	473622-19-4	473622-20-7
473622-21-8	473622-22-9	473622-23-0	473622-24-1	473622-25-2
473622-26-3	473622-27-4	473622-28-5	473622-29-6	473622-30-9
473622-31-0	473622-32-1	473622-33-2	473622-34-3	473622-35-4
473622-36-5	473622-37-6	473622-38-7	473622-39-8	473622-40-1
473622-41-2	473622-42-3	473622-43-4	473622-44-5	473622-45-6
473622-46-7	473622-47-8	473622-48-9	473622-49-0	473622-50-3
473622-51-4	473622-52-5	473622-53-6	473622-54-7	473622-55-8
473622-56-9	473622-57-0	473622-58-1	473622-59-2	473622-60-5
473622-61-6	473622-62-7	473622-64-9	473622-70-7	473622-72-9
473622-75-2	473622-78-5	473622-81-0	473622-82-1	473622-84-3
473622-85-4	473622-89-8	473622-91-2	473622-93-4	473622-95-6
473622-97-8	473622-99-0			

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT 473623-01-7	473623-04-0	473623-06-2	473623-09-5	473623-19-7
473623-49-3	473623-51-7	473623-53-9	473623-55-1	473623-57-3
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473623-81-3	473623-86-8	473623-89-1	473623-93-7	473623-97-1
473624-09-8	473624-19-0	473624-21-4	473624-23-6	473624-29-2
473624-31-6	473624-34-9	473624-39-4	473624-44-1	473624-66-7
473624-68-9	473624-72-5	473624-74-7	473624-77-0	473624-80-5
473625-07-9	473625-12-6	473625-14-8	473625-20-6	473625-28-4
473625-34-2	473625-36-4	473625-43-3	473625-48-8	473625-52-4
473625-57-9	473625-61-5	473625-63-7	473625-65-9	473625-67-1
473625-71-7	473625-73-9	473625-76-2	473625-78-4	473625-81-9
473625-84-2	473625-86-4	473625-88-6	473625-92-2	473625-96-6
473625-98-8	473626-18-5	473626-34-5	473626-37-8	473626-40-3
473626-46-9	473626-49-2	473626-62-9	473626-70-9	473626-72-1
473626-75-4	473626-80-1	473626-82-3	473626-84-5	473626-86-7

473626-88-9	473626-90-3	473626-92-5	473626-94-7	473626-96-9
473626-98-1	473627-00-8	473627-02-0	473627-04-2	473627-06-4
473627-08-6	473627-10-0	473627-12-2	473627-14-4	
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473627-26-8	473627-28-0	473627-30-4	473627-32-6	
473627-34-8	473627-37-1	473627-39-3	473627-40-6	473627-41-7
473627-43-9	473627-44-0	473627-46-2	473627-47-3	
473627-50-8	473627-54-2	473627-56-4	473627-58-6	473627-60-0
473627-62-2	473627-64-4	473627-68-8	473627-70-2	473627-72-4
473627-74-6	473627-76-8	473627-78-0	473627-81-5	473627-83-7
473627-85-9	473627-86-0	473627-88-2	473627-91-7	473627-95-1
473627-97-3	473628-01-2	473628-03-4	473628-07-8	473628-09-0
473628-11-4	473628-13-6	473628-16-9	473628-38-5	473628-42-1
473628-45-4	473628-48-7	473628-53-4	473628-58-9	
473628-84-1	473628-86-3	473628-89-6	473628-98-7	473629-01-5
473629-03-7	473629-06-0	473629-08-2	473629-10-6	473629-13-9
473629-15-1	473629-17-3	473629-19-5	473629-26-4	473629-29-7
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473629-51-5	473629-52-6	473629-53-7	473629-54-8	473629-55-9
473629-56-0	473629-57-1	473629-58-2	473629-59-3	473629-60-6
473629-61-7	473629-62-8	473629-63-9	473629-64-0	473629-65-1
473629-66-2	473629-67-3	473629-68-4	473629-69-5	473629-70-8
473629-71-9	473629-72-0	473629-73-1	473629-74-2	473629-75-3
473629-76-4	473629-77-5	473629-78-6	473629-79-7	473629-80-0
473629-81-1	473629-82-2	473629-83-3	473629-84-4	473629-85-5
473629-86-6	473629-87-7	473629-88-8	473629-89-9	473629-90-2
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473629-96-8	473629-97-9	473629-98-0	473629-99-1	473630-00-1
473630-01-2	473630-02-3	473630-03-4	473630-04-5	473630-05-6
473630-06-7	473630-07-8	473630-08-9	473630-09-0	473630-10-3
473630-11-4				

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

IT	473630-12-5	473630-13-6	473630-14-7	473630-15-8	473630-16-9
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(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

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473628-58-9

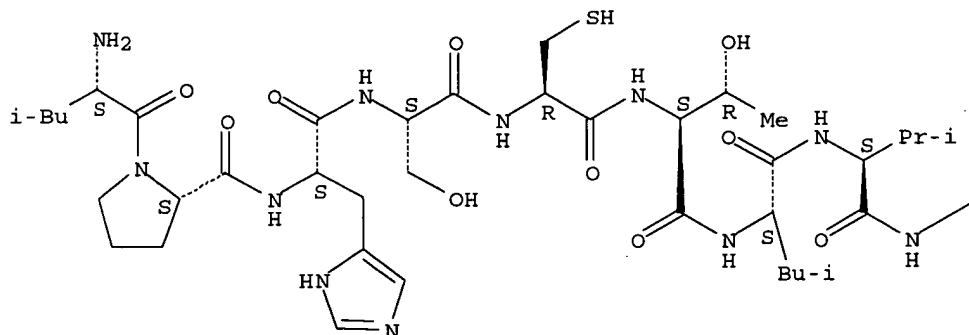
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(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

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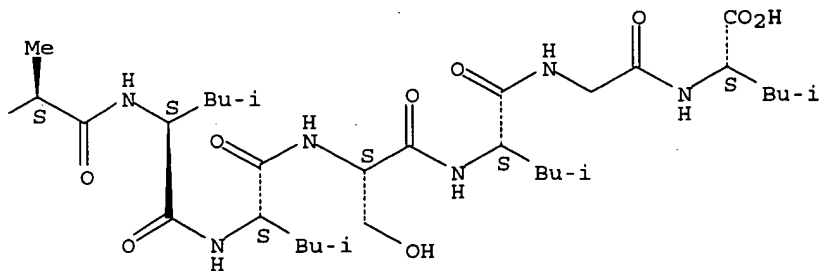
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(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



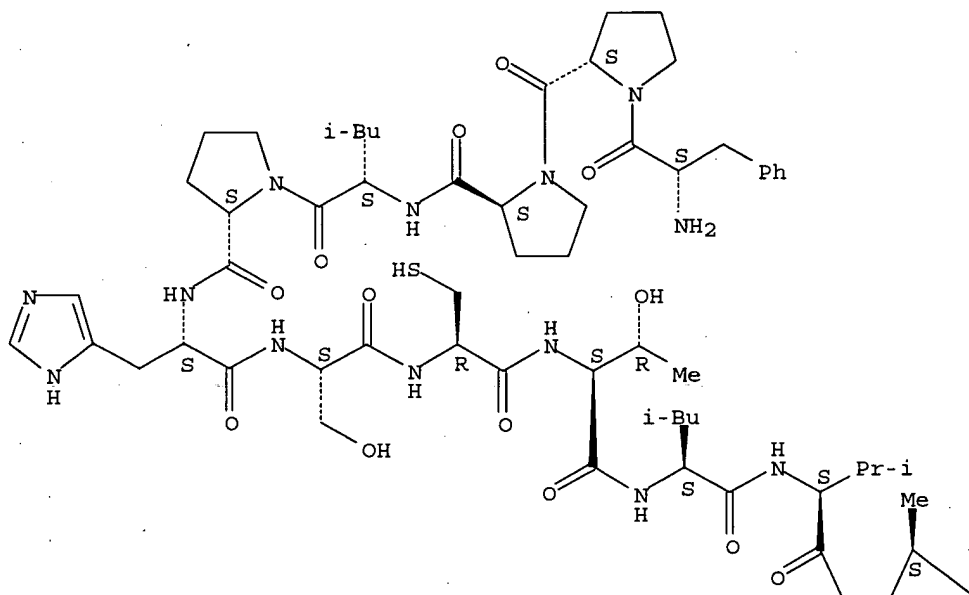
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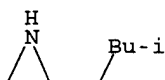
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(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



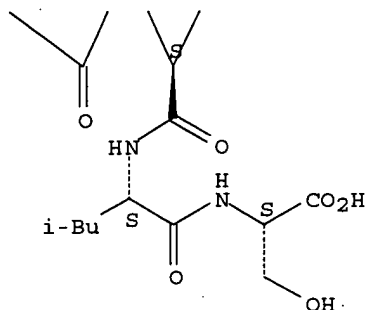
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PAGE 2-A



PAGE 2-B

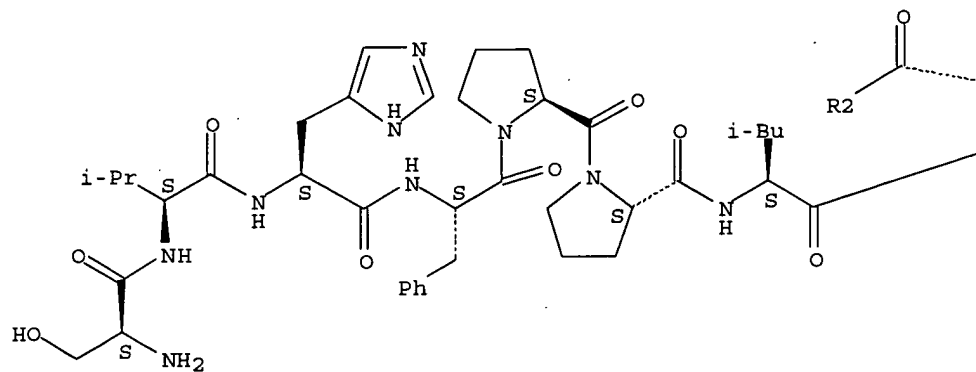


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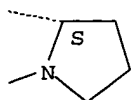
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Absolute stereochemistry.

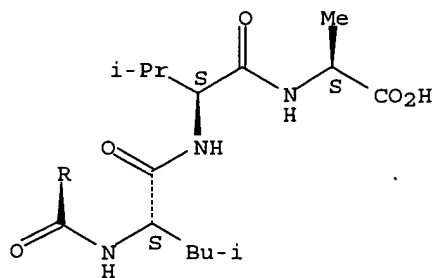
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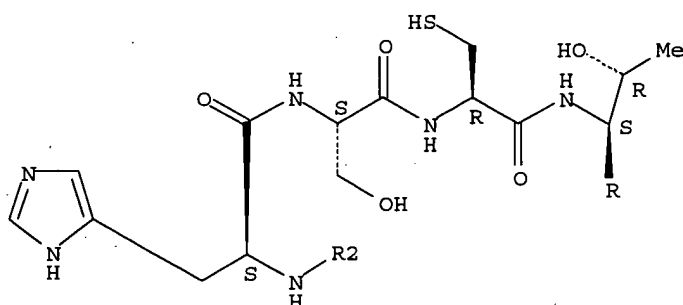
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PAGE 2-A



PAGE 3-A

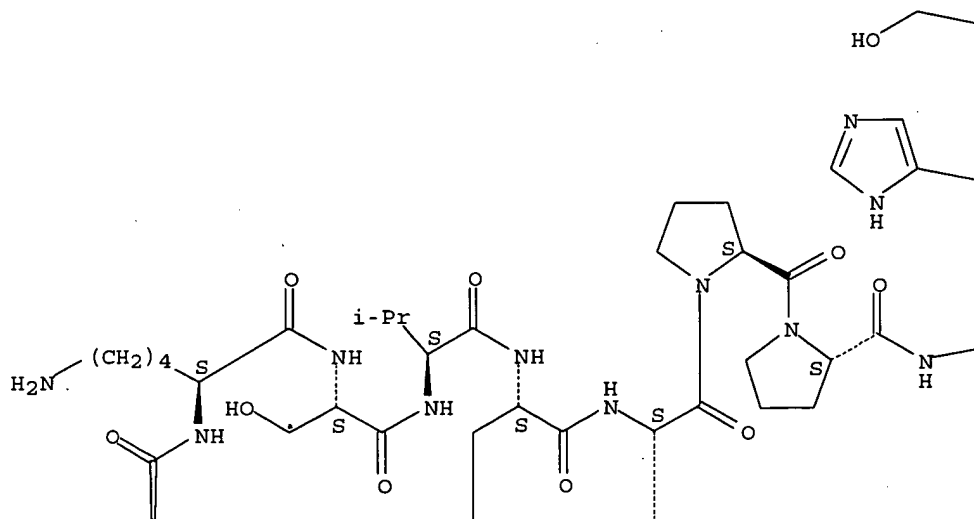


RN 473628-58-9 HCAPLUS

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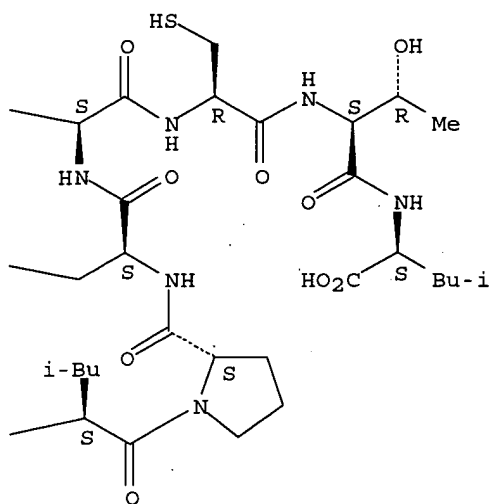
Absolute stereochemistry.

PAGE 1-A

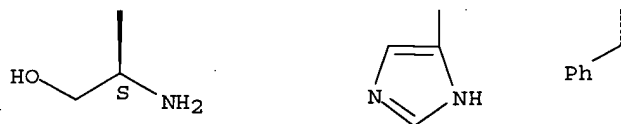


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PAGE 1-B



PAGE 2-A



L24 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:676325 HCAPLUS
 DN 137:231363
 ED Entered STN: 08 Sep 2002
 TI Computerized methods for identifying T cell epitope and use for preparing
 protein or antibody therapeutic agent with reduced immunogenicity
 IN Carr, Francis J.; Carter, Graham; Jones, Tim; Williams, Stephen; Hamilton,
 Anita
 PA Merck Patent G.m.b.H., Germany
 SO PCT Int. Appl., 85 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM G06F019-00
 ICS C07K016-18; C07K014-285; C07K016-30; C07K014-575; C07K014-545;
 C07K014-475; C07K014-535; C07K014-50; C07K014-525; C12N009-24;
 C12N009-64; C12N009-54; C07K014-59; C07K014-415; C07K014-47;
 C07K016-18; C07K016-28
 CC 15-3 (Immunochemistry)
 Section cross-reference(s): 1, 3, 63
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UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
 TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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 EP 1366455 A2 20031203 EP 2002-726112 20020218 <--
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 CN 1493052 A 20040428 CN 2002-805157 20020218 <--
 JP 2004523754 T2 20040805 JP 2002-568279 20020218 <--
 US 2004180386 A1 20040916 US 2003-468496 20030819 <--
 PRAI EP 2001-103954 A 20010219 <--
 EP 2001-105777 A 20010308 <--
 EP 2001-106536 A 20010315 <--
 EP 2001-106538 A 20010315 <--
 EP 2001-106899 A 20010320 <--
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 EP 2001-113228 A 20010530 <--
 EP 2001-124965 A 20011019 <--
 EP 2001-126859 A 20011112 <--
 WO 2002-EP1688 W 20020218 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 2004180386	NCL ECLA	435/007.210; 702/019.000 A61K009/70D; A61K047/02; A61K047/12; C07K014/54; C07K016/18; C07K016/28H; C07K016/28Z; C07K016/30; C07K016/30K; C07K016/46B2; C07K016/46B2B; G06F019/00C2 <--

AB Computerized method, with Bohm scoring function modified to include 12-6
 van der Waal's ligand protein energy repulsive term and ligand
 conformational energy term based on MHC class II mol., is used for
 identification of T-cell epitopes, that give rise to an immune reaction in
 a living host. By means of this novel method biol. compds. can be
 generated which have a no or at least a reduced immunogenicity when
 exposed to the immune system of a given species and compared with the
 relevant non-modified entity. Thus the invention relates also to novel
 biol. mols., especially proteins and antibodies, obtained by the method
 according to the invention.

ST computerized method T cell epitope protein antibody immunogenicity redn
 IT Glycoproteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (40 kDa; computerized methods for identifying T cell epitope and use
 for preparing protein or antibody therapeutic agent with reduced
 immunogenicity)

IT Ricins

- RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(A, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A-I; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A33; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Acrp30; T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD52; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(GLP-1; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(IgG1, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Histocompatibility antigens
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(MHC (major histocompatibility complex), binding epitope; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Histocompatibility antigens
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(MHC (major histocompatibility complex), class II; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Biochemical compounds
(T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
Fusion proteins (chimeric proteins)
Interleukin 1 receptor antagonist
Proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

- IT Epitopes
(T cell; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Structure-activity relationship
(antibody-binding; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Structure-activity relationship
(antigen-binding; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(autoantigens, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Transplant and Transplantation
(bone marrow; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Neurotrophic factors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(brain-derived, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Cytokines
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cardiotrophin-like; T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Neurotrophic factor receptors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ciliary, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Anemia (disease)
- Antitumor agents
- Autoimmune disease
- Bacillus amyloliquefaciens
- Bacillus lentus
- Bacillus licheniformis
- Bacillus subtilis
- Blood vessel, disease
- Burn
- Cachexia
- Cardiopulmonary bypass
- Computer program
- Cosmetics
- Databases
- Detergents
- Diabetes mellitus
- Gaucher disease
- Hematopoiesis
- Human
- Hypertension
- Immunomodulators
- Immunosuppressants

Infection
 Inflammation
 Injury
 Intestine, neoplasm
 Lymphoma
 Lysosomal storage disease
 Mus
 Pregnancy
 Protein sequences
 Rheumatoid arthritis
 Sepsis
 Simulation and Modeling, physicochemical
 Surgery
 Textiles
 Thrombosis
 Transplant and Transplantation
 Transplant rejection
 Van der Waals potential
 Wound healing
 (computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT CD20 (antigen)
 Epidermal growth factor receptors
 Interleukin 2 receptors
 neu (receptor)
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Ligands
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (conformational energy; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Nerve, disease
 (degeneration; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Metabolism, animal
 (disorder, cholesterol; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Metabolism, animal
 (disorder, fatty acid; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Blood coagulation
 (disorder; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT T cell (lymphocyte)
 (epitope; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Kidney, disease
 (failure, chronic; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Interleukin 6
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (family; receptor cytokine-like factor 1; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

- PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (fragments, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (fusion products, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Transplant and Transplantation
 (graft-vs.-host reaction; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (heavy chain, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (humanized, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Allergy
 (hypersensitivity; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Drug delivery systems
 (immunotoxins; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Autoimmune disease
 (insulin-dependent diabetes mellitus; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Diabetes mellitus
 (insulin-dependent; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Transplant and Transplantation
 (kidney, rejection; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (light chain, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Fatty acids, biological studies
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (metabolic disease; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Antibodies and Immunoglobulins
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP

- (Preparation); USES (Uses)
(monoclonal, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Conformation
(protein, ligand energy; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Leukemia
(refractory; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Mutagenesis
(site-directed, addition; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Mutagenesis
(site-directed, deletion; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Mutagenesis
(site-directed, substitution; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Brain, disease
(stroke; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Eubacteria
Fungi
Mammalia
Vertebrata
(subtilisin; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Kidney
(transplant, rejection; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Bone marrow
(transplant; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Injury
(trauma; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Tumor necrosis factor receptors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(type 1, T cell epitope-modified; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT Tumor necrosis factor receptors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(type 2; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT 148348-15-6P, Fibroblast growth factor 7
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(T cell epitope-modified; computerized methods for identifying T cell

epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT 457106-77-3P 457106-94-4P, Leptin (human fragment) 457106-95-5P
 457106-96-6P 457106-97-7P, Erythropoietin (human fragment)
 457106-98-8P 457106-99-9P 457107-00-5P 457107-01-6P 457107-02-7P
 457107-03-8P 457107-04-9P 457107-05-0P 457107-06-1P 457107-07-2P
 457107-08-3P 457107-09-4P 457107-10-7P 457107-11-8DP, T-cell
 epitope-modified derivs. 457107-12-9DP, T-cell epitope-modified derivs.
 457107-13-0DP, T-cell epitope-modified derivs. 457107-14-1DP, T-cell
 epitope-modified derivs. 457107-15-2DP, T-cell epitope-modified derivs.
 457107-16-3DP, T-cell epitope-modified derivs. 457107-17-4P
 457107-18-5P 457107-19-6P 457107-20-9P 457107-21-0P 457107-22-1DP,
 T-cell epitope-modified derivs. 457107-23-2DP, T-cell epitope-modified
 derivs. 457107-24-3DP, T-cell epitope-modified derivs. 457107-25-4DP,
 T-cell epitope-modified derivs. 457107-26-5P 457107-27-6P
 457107-28-7P 457107-29-8P
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)
 (amino acid sequence; computerized methods for identifying T cell
 epitope and use for preparing protein or antibody therapeutic agent with
 reduced immunogenicity)

IT 65988-71-8, GD2
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (antibody to; computerized methods for identifying T cell epitope and
 use for preparing protein or antibody therapeutic agent with reduced
 immunogenicity)

IT 80295-53-0, Complement C5
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (antibody to; computerized methods for identifying T cell epitope and
 use for preparing protein or antibody therapeutic agent with reduced
 immunogenicity)

IT 98625-78-6 193744-12-6 193744-14-8 193744-16-0 200436-43-7
 445043-04-9 445043-05-0 445043-06-1 445043-07-2 445043-08-3
 445043-09-4 445043-10-7 445043-11-8 445043-12-9 445043-13-0
 445043-14-1 445043-15-2 445043-16-3 445043-17-4 445043-18-5
 445043-19-6 445043-20-9 445043-21-0 445043-22-1 445043-23-2
 445043-24-3 445043-25-4 445043-26-5 445043-27-6 445043-28-7
 445043-29-8 445043-30-1 445043-31-2 445043-32-3 445043-33-4
 445043-34-5 445043-35-6 445043-36-7 445043-37-8 445247-54-1
 445247-55-2 445247-56-3 445247-57-4 445247-58-5 445247-59-6
 445247-60-9 445247-61-0 445247-62-1 445247-63-2 445247-66-5
 445247-67-6 445247-68-7 445247-69-8 445247-70-1 445247-71-2
 445247-72-3 445247-73-4 445247-74-5 445247-75-6 445247-76-7
 445247-79-0 445247-80-3 445247-81-4 445247-82-5 445247-83-6
 445247-84-7 445247-85-8 445247-86-9 445247-87-0 445247-88-1
 445247-89-2 445247-90-5 445247-91-6 445247-92-7 445247-93-8
 445247-94-9 445247-95-0 445247-96-1 445247-97-2 445247-98-3
 445247-99-4 445248-00-0 445386-03-8 445386-04-9 445386-05-0
 445386-06-1 445386-07-2 445386-08-3 445386-09-4 445386-10-7
 445386-11-8 445386-12-9 445386-13-0 445386-14-1 445386-15-2
 445386-16-3 445386-17-4 445386-18-5 445386-19-6 445386-20-9
 445386-21-0 445386-22-1 445386-23-2 445386-24-3 445386-25-4
 445386-26-5 445386-27-6 445386-28-7 445386-29-8 445386-30-1
 445386-31-2 445386-32-3 445386-33-4 445386-34-5 445386-35-6
 445386-36-7 445386-37-8 445386-38-9 445386-39-0 445386-40-3
 445386-41-4 445386-42-5 445386-43-6 445386-44-7 445386-45-8
 445386-46-9 445386-47-0 445386-48-1 445386-49-2 445386-50-5
 445386-51-6 445386-52-7 445386-53-8 445386-54-9 445386-55-0
 445386-56-1 445386-57-2 445386-58-3 445386-59-4 445386-60-7
 445386-61-8 445386-62-9 445386-63-0 445386-64-1 445386-65-2
 445386-66-3 445386-67-4 445386-68-5 445386-69-6 445386-70-9
 445386-71-0 445386-72-1 445386-73-2 445388-39-6 445388-40-9
 445388-41-0 445388-42-1 445388-43-2 445388-44-3 445388-45-4
 445388-46-5 445388-47-6 445388-48-7 445388-49-8 445388-50-1

445388-51-2	445388-52-3	445388-53-4	445388-54-5	445388-55-6
445388-56-7	445388-57-8	445388-58-9	445388-59-0	445388-60-3
445388-61-4	445388-62-5	445388-63-6	445388-64-7	445388-65-8
445388-66-9	445388-67-0	445388-68-1	445388-69-2	445388-70-5
445388-71-6	445388-72-7	445388-73-8	445388-74-9	445388-75-0
445388-76-1	445388-77-2	445388-78-3	445388-79-4	445388-80-7
445388-81-8	445388-82-9	445388-83-0	445388-84-1	446010-93-1
446010-94-2	446010-95-3	446010-96-4	446010-97-5	446010-98-6
446010-99-7	446011-00-3	446011-01-4	446011-02-5	446011-03-6
446011-04-7	446011-05-8	446011-06-9	446011-07-0	446011-08-1
446011-09-2	446011-10-5	446011-11-6	446011-12-7	446011-13-8
446011-14-9	446011-15-0	446011-16-1	446011-17-2	446011-18-3
446011-19-4	446011-20-7	446011-21-8	446011-22-9	446011-23-0
446011-24-1	446011-25-2	446011-26-3	446011-27-4	446011-28-5

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST
(Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing
protein or antibody therapeutic agent with reduced immunogenicity)

IT	446011-29-6	446011-30-9	446011-31-0	446011-32-1	446011-33-2
	446011-34-3	446011-35-4	446011-36-5	446011-37-6	446011-38-7
	446011-39-8	446011-40-1	446011-41-2	446011-42-3	446011-43-4
	454170-95-7	454170-96-8	454170-97-9	454170-98-0	454170-99-1
	454171-00-7	454171-01-8	454171-02-9	454171-03-0	454171-04-1
	454171-05-2	454171-06-3	454171-07-4	454171-08-5	454171-09-6
	454171-10-9	454171-11-0	454171-12-1	454171-13-2	454171-14-3
	454171-15-4	454171-16-5	454171-17-6	454171-18-7	454171-19-8
	454171-20-1	454171-21-2	454171-22-3	454171-23-4	454171-24-5
	454171-25-6	454171-26-7	454171-27-8	454171-28-9	454171-29-0
	454171-30-3	454171-31-4	454171-32-5	454171-33-6	454171-34-7
	454171-35-8	454171-36-9	454171-37-0	454171-38-1	454171-39-2
	454171-40-5	454171-41-6	454171-42-7	454171-43-8	454171-44-9
	454171-45-0	454171-47-2	454171-48-3	454171-49-4	454171-50-7
	454171-51-8	454171-52-9	454171-53-0	454171-54-1	454171-55-2
	454171-56-3	454171-57-4	454171-58-5	454171-59-6	454171-60-9
	454171-61-0	454171-62-1	454171-63-2	454171-64-3	454171-65-4
	454171-66-5	454171-67-6	454171-68-7	454171-69-8	454171-70-1
	454171-71-2	454171-72-3	454171-73-4	454171-74-5	454171-75-6
	454171-76-7	454171-77-8	454171-78-9	454171-79-0	454171-80-3
	454171-81-4	454171-82-5	454171-83-6	454171-84-7	454171-85-8
	454171-86-9	454171-87-0	454171-88-1	454171-89-2	454171-90-5
	454171-91-6	454171-92-7	454171-93-8	454171-94-9	454171-95-0
	454171-96-1	454171-97-2	454171-98-3	454171-99-4	454172-00-0
	454172-01-1	454172-02-2	454172-03-3	454172-04-4	454172-05-5
	454172-06-6	454172-07-7	454172-09-9	454172-10-2	454172-11-3
	454172-12-4	454172-13-5	454172-14-6	454172-15-7	454172-16-8
	454172-17-9	454172-19-1	454172-20-4	454172-21-5	454172-22-6
	454172-23-7	454172-24-8	454172-25-9	454172-26-0	454172-27-1
	454172-28-2	454172-29-3	454172-30-6	454172-31-7	454172-32-8
	454172-33-9	454172-34-0	454172-35-1	454172-36-2	454172-37-3
	454172-38-4	454172-39-5	454172-40-8	454172-41-9	454172-42-0
	454172-43-1	454172-44-2	454172-45-3	454172-46-4	454172-47-5
	454172-48-6	454172-49-7	454172-50-0	454172-51-1	454172-52-2
	454172-53-3	454172-54-4	454172-55-5	454172-56-6	454172-57-7
	454172-58-8	454172-59-9	454172-60-2	454172-61-3	454172-62-4
	454172-63-5	454172-64-6	454172-65-7	454172-66-8	454172-67-9
	454172-68-0	454172-69-1	454172-70-4	454172-71-5	454172-72-6
	454172-73-7	454172-74-8	454172-75-9	454172-76-0	454172-77-1
	454172-78-2	454172-79-3	454172-80-6	454172-81-7	454172-82-8
	454172-83-9	454172-84-0	454172-85-1	454172-86-2	454172-87-3
	454172-88-4	454172-89-5	454172-90-8	454172-91-9	454172-92-0
	454172-93-1	454172-94-2	454172-95-3	454172-96-4	454172-98-6
	454172-99-7	454173-00-3	454173-01-4	454173-02-5	454173-03-6
	454173-04-7	454173-05-8	454173-06-9	454173-07-0	454173-08-1
	454173-09-2	454173-10-5	454173-11-6	454173-12-7	454173-13-8
	454173-14-9	454173-15-0	454173-16-1	454173-17-2	454173-18-3

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST

(Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT	454173-19-4	454173-20-7	454173-21-8	454173-22-9	454173-23-0
	454173-24-1	454173-25-2	454173-26-3	454173-27-4	454173-28-5
	454173-29-6	454173-30-9	454173-31-0	454173-32-1	454173-33-2
	454173-34-3	454173-35-4	454173-36-5	454173-37-6	454173-38-7
	454173-39-8	454173-40-1	454173-41-2	454173-42-3	454173-43-4
	454173-44-5	454173-45-6	454173-46-7	454173-47-8	454173-48-9
	454173-49-0	454173-50-3	454173-51-4	454173-52-5	454173-53-6
	454173-54-7	454173-55-8	454173-56-9	454173-57-0	454173-58-1
	454173-59-2	454173-60-5	454173-61-6	454173-62-7	454173-63-8
	454173-64-9	454173-65-0	454173-66-1	454173-67-2	454173-68-3
	454173-69-4	454173-70-7	454173-71-8	454173-72-9	454173-73-0
	454173-74-1	454173-75-2	454173-76-3	454173-77-4	454173-78-5
	454173-79-6	454173-80-9	454173-81-0	454173-82-1	454173-83-2
	454173-84-3	454173-85-4	454173-86-5	454173-87-6	454173-88-7
	454173-89-8	454173-90-1	454173-91-2	454173-92-3	454173-93-4
	454173-94-5	454173-95-6	454173-96-7	454173-97-8	454173-98-9
	454173-99-0	454174-00-6	454174-01-7	454174-02-8	454174-03-9
	454174-04-0	454174-05-1	454174-06-2	454174-07-3	454174-08-4
	454174-09-5	454174-11-9	454174-12-0	454174-13-1	454174-14-2
	454174-15-3	454174-16-4	454174-17-5	454174-18-6	454174-19-7
	454174-20-0	454174-21-1	454174-22-2	454174-23-3	454174-24-4
	454174-25-5	454174-26-6	454174-27-7	454174-28-8	454174-29-9
	454174-30-2	454174-31-3	454174-32-4	454174-33-5	454174-34-6
	454174-35-7	454174-36-8	454174-37-9	454174-38-0	454174-39-1
	454174-40-4	457867-13-9	457867-14-0	457867-15-1	457867-18-4
	457867-19-5	457867-20-8	457867-21-9	457867-22-0	457867-23-1
	457867-24-2	457867-25-3	457867-26-4	457867-27-5	457867-28-6
	457867-29-7	457867-30-0	457867-31-1	457867-32-2	457867-33-3
	457867-34-4	457867-35-5	457867-36-6	457867-37-7	457867-38-8
	457867-39-9	457867-40-2	457867-41-3	457867-42-4	457867-43-5
	457867-44-6	457867-45-7	457867-46-8	457867-47-9	457867-48-0
	457867-49-1	457867-50-4	457867-51-5	457867-52-6	457867-53-7
	457867-54-8	457867-55-9	457867-56-0	457867-57-1	457867-58-2
	457867-59-3	457867-60-6	457867-61-7	457867-62-8	457867-63-9
	457867-64-0	457867-65-1	457867-66-2	457867-67-3	457867-68-4
	457867-69-5	457867-70-8	457867-71-9	457867-72-0	457867-73-1
	457867-74-2	457867-75-3	457867-76-4	457867-77-5	457867-78-6
	457867-79-7	457867-80-0	457867-81-1	457867-82-2	457867-83-3
	457867-84-4	457867-85-5	457867-86-6	457867-87-7	457867-88-8
	457867-89-9	457867-90-2	457867-91-3	457867-92-4	457867-93-5
	457867-94-6	457867-95-7	457867-96-8	457867-97-9	457867-98-0
	457867-99-1	457868-00-7	457868-01-8	457868-02-9	457868-03-0
	457868-04-1	457868-05-2	457868-06-3	457868-07-4	457868-08-5
	457868-09-6	457868-10-9	457868-11-0	457868-12-1	457868-13-2
	457868-14-3	457868-15-4	457868-16-5	457868-17-6	457868-18-7
	457868-19-8	457868-20-1	457868-21-2	457868-22-3	457868-23-4
	457868-24-5	457868-25-6	457868-26-7	457868-27-8	457868-28-9

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST

(Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT	457868-29-0	457868-30-3	457868-31-4	457868-32-5	457868-33-6
	457868-34-7	457868-35-8	457868-36-9	457868-37-0	457868-38-1
	457868-39-2	457868-40-5	457868-41-6	457868-42-7	457868-43-8
	457868-44-9	457868-45-0	457868-46-1	457868-47-2	457868-48-3
	457868-49-4	457868-50-7	457868-51-8	457868-52-9	457868-53-0
	457868-54-1	457868-55-2	457868-56-3	457868-57-4	457868-58-5
	457868-59-6	457868-60-9	457868-61-0	457868-62-1	457868-63-2
	457868-64-3	457868-65-4	457868-66-5	457868-67-6	457868-68-7
	457868-69-8	457868-70-1	457868-71-2	457868-73-4	457868-75-6
	457868-77-8	457868-78-9	457868-79-0	457868-80-3	457868-81-4
	457868-82-5	457868-83-6	457868-84-7	457868-85-8	457868-86-9
	457868-87-0	457868-88-1	457868-89-2	457868-90-5	457868-91-6

457868-92-7	457868-93-8	457868-94-9	457868-95-0	457868-96-1
457868-97-2	457868-98-3	457868-99-4	457869-00-0	457869-01-1
457869-02-2	457869-03-3	457869-04-4	457869-05-5	457869-06-6
457869-07-7	457869-08-8	457869-09-9	457869-10-2	457869-11-3
457869-12-4	457869-13-5	457869-14-6	457869-15-7	457869-16-8
457869-17-9	457869-18-0	457869-19-1	457869-20-4	457869-21-5
457869-22-6	457869-23-7	457869-24-8	457869-25-9	457869-26-0
457869-27-1	457869-28-2	457869-29-3	457869-30-6	457869-31-7
457869-32-8	457869-33-9	457869-34-0	457869-35-1	457869-36-2
457869-37-3	457869-38-4	457869-39-5	457869-40-8	457869-41-9
457869-42-0	457869-43-1	457869-44-2	457869-45-3	457869-46-4
457869-47-5	457869-48-6	457869-49-7	457869-50-0	457869-51-1
457869-52-2	457869-53-3	457869-54-4	457869-55-5	457869-56-6
457869-57-7	457869-58-8	457869-59-9	457869-60-2	457869-61-3
457869-62-4	457869-63-5	457869-64-6	457869-65-7	457869-66-8
457869-67-9	457869-68-0	457869-69-1	457869-70-4	457869-71-5
457869-72-6	457869-73-7	457869-74-8	457869-75-9	457869-76-0
457869-77-1	457869-78-2	457869-79-3	457869-80-6	457869-81-7
457869-82-8	457869-83-9	457869-84-0	457869-85-1	457869-86-2
457869-87-3	457869-88-4	457869-89-5	457869-90-8	457869-91-9
457869-92-0	457869-93-1	457869-94-2	457869-95-3	457869-96-4
457869-97-5	457869-98-6	457869-99-7	457870-00-7	457870-01-8
457870-02-9	457870-03-0	457870-04-1	457870-05-2	457870-06-3
457870-07-4	457870-08-5	457870-09-6	457870-10-9	457870-11-0
457870-12-1	457870-13-2	457870-14-3	457870-15-4	457870-16-5
457870-17-6	457870-18-7	457870-19-8	457870-20-1	457870-21-2
457870-22-3	457870-23-4	457870-24-5	457870-25-6	457870-26-7
457870-27-8	457870-28-9	457870-29-0	457870-30-3	457870-31-4
457870-32-5	457870-33-6	457870-34-7	457870-35-8	457870-36-9
457870-37-0	457870-38-1	457870-39-2	457870-40-5	457870-41-6
457870-42-7	457870-43-8	457870-44-9	457870-45-0	457870-46-1
457870-47-2	457870-48-3	457870-49-4	457870-50-7	457870-51-8
457870-52-9	457870-53-0	457870-54-1	457870-55-2	457870-56-3
457870-57-4	457870-58-5	457870-59-6	457870-60-9	457870-61-0
457870-62-1	457870-63-2	457870-64-3	457870-65-4	457870-66-5

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST (Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT	457870-67-6	457870-68-7	457870-69-8	457870-70-1	457870-71-2
	457870-72-3	457870-73-4	457870-74-5	457870-75-6	457870-76-7
	457870-77-8	457870-78-9	457870-79-0	457870-80-3	457870-81-4
	457870-82-5	457870-83-6	457870-84-7	457870-85-8	457870-86-9
	457870-87-0	457870-88-1	457870-89-2	457870-90-5	457870-91-6
	457870-92-7	457870-93-8	457870-94-9	457870-95-0	457870-96-1
	457870-97-2	457870-98-3	457870-99-4	457871-00-0	457871-01-1
	457871-02-2	457871-03-3	457871-04-4	457871-05-5	457871-06-6
	457871-07-7	457871-08-8	457871-09-9	457871-10-2	457871-11-3
	457871-12-4	457871-13-5	457871-14-6	457871-15-7	457871-16-8
	457871-17-9	457871-18-0	457871-19-1	457871-20-4	457871-21-5
	457871-22-6	457871-23-7	457871-24-8	457871-25-9	457871-26-0
	457871-27-1	457871-28-2	457871-29-3	457871-30-6	457871-31-7
	457871-32-8	457871-33-9	457871-34-0	457871-35-1	457871-36-2
	457871-37-3	457871-38-4	457871-39-5	457871-40-8	457871-41-9
	457871-42-0	457871-43-1	457871-44-2	457871-45-3	457871-46-4
	457871-47-5	457871-48-6	457871-49-7	457871-50-0	457871-51-1
	457871-52-2	457871-53-3	457871-54-4	457871-55-5	457871-56-6
	457871-57-7	457871-58-8	457871-59-9	457871-60-2	457871-61-3
	457871-62-4	457871-63-5	457871-64-6	457871-65-7	457871-66-8
	457871-67-9	457871-68-0	457871-69-1	457871-70-4	457871-71-5
	457871-72-6	457871-73-7	457871-74-8	457871-75-9	457871-76-0
	457871-77-1	457871-78-2	457871-79-3	457871-80-6	457871-81-7
	457871-82-8	457871-83-9	457871-84-0	457871-85-1	457871-86-2
	457871-87-3	457871-88-4	457871-89-5	457871-90-8	457871-91-9
	457871-92-0	457871-93-1	457871-94-2	457871-95-3	457871-96-4
	457871-97-5	457871-98-6	457871-99-7	457872-00-3	457872-01-4

457872-02-5	457872-03-6	457872-04-7	457872-05-8	457872-06-9
457872-07-0	457872-08-1	457872-09-2	457872-10-5	457872-11-6
457872-12-7	457872-13-8	457872-14-9	457872-15-0	457872-16-1
457872-17-2	457872-18-3	457872-19-4	457872-20-7	457872-21-8
457872-22-9	457872-23-0	457872-24-1	457872-25-2	457872-26-3
457872-27-4	457872-28-5	457872-29-6	457872-30-9	457872-31-0
457872-32-1	457872-33-2	457872-34-3	457872-35-4	457872-36-5
457872-37-6	457872-38-7	457872-39-8	457872-40-1	457872-41-2
457872-42-3	457872-43-4	457872-44-5	457872-45-6	457872-46-7
457872-47-8	457872-48-9	457872-49-0	457872-50-3	457872-51-4
457872-52-5	457872-53-6	457872-54-7	457872-55-8	457872-56-9
457872-57-0	457872-58-1	457872-59-2	457872-60-5	457872-61-6
457872-62-7	457872-63-8	457872-64-9	457872-65-0	457872-66-1
457872-67-2	457872-68-3	457872-69-4	457872-70-7	457872-71-8
457872-72-9	457872-73-0	457872-74-1	457872-75-2	457872-76-3
457872-77-4	457872-78-5	457872-79-6	457872-80-9	457872-81-0
457872-82-1	457872-83-2	457872-84-3	457872-85-4	457872-86-5
457872-87-6	457872-88-7	457872-89-8	457872-90-1	457872-91-2
457872-92-3	457872-93-4	457872-94-5	457872-95-6	457872-96-7
457872-97-8	457872-98-9	457872-99-0	457873-00-6	457873-01-7

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST
(Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing
protein or antibody therapeutic agent with reduced immunogenicity)

IT	457873-02-8	457873-03-9	457873-04-0	457873-05-1	457873-06-2
	457873-07-3	457873-08-4	457873-09-5	457873-10-8	457873-11-9
	457873-12-0	457873-13-1	457873-14-2	457873-15-3	457873-16-4
	457873-17-5	457873-18-6	457873-19-7	457873-20-0	457873-21-1
	457873-22-2	457873-23-3	457873-24-4	457873-25-5	457873-26-6
	457873-27-7	457873-28-8	457873-29-9	457873-30-2	457873-31-3
	457873-32-4	457873-33-5	457873-34-6	457873-35-7	457873-36-8
	457873-37-9	457873-38-0	457873-39-1	457873-40-4	457873-41-5
	457873-42-6	457873-43-7	457873-44-8	457873-45-9	457873-46-0
	457873-47-1	457873-48-2	457873-49-3	457873-50-6	457873-51-7
	457873-52-8	457873-53-9	457873-54-0	457873-55-1	457873-56-2
	457873-57-3	457873-58-4	457873-59-5	457873-60-8	457873-61-9
	457873-62-0	457873-63-1	457873-64-2	457873-65-3	457873-66-4
	457873-67-5	457873-68-6	457873-69-7	457873-70-0	457873-71-1
	457873-72-2	457873-73-3	457873-74-4	457873-75-5	457873-76-6
	457873-77-7	457873-78-8	457873-79-9	457873-80-2	457873-81-3
	457873-82-4	457873-83-5	457873-84-6	457873-85-7	
	457873-86-8	457873-87-9	457873-88-0	457873-89-1	457873-90-4
	457873-91-5	457873-92-6	457873-93-7	457873-94-8	457873-95-9
	457873-97-1	457873-98-2	457873-99-3	457874-00-9	457874-01-0
	457874-02-1	457874-03-2	457874-04-3	457874-05-4	457874-06-5
	457874-07-6	457874-08-7	457874-09-8	457874-10-1	457874-11-2
	457874-12-3	457874-13-4	457874-14-5	457874-15-6	457874-16-7
	457874-17-8	457874-18-9	457874-19-0	457874-20-3	
	457874-21-4	457874-22-5	457874-23-6	457874-24-7	457874-25-8
	457874-26-9	457874-27-0	457874-28-1	457874-29-2	457874-30-5
	457874-31-6	457874-32-7	457874-33-8	457874-34-9	457874-35-0
	457874-36-1	457874-37-2	457874-38-3	457874-39-4	457874-40-7
	457874-41-8	457874-42-9	457874-43-0	457874-44-1	457874-45-2
	457874-46-3	457874-47-4	457874-48-5	457874-49-6	457874-50-9
	457874-51-0	457874-52-1	457874-53-2	457874-54-3	457874-55-4
	457874-56-5	457874-57-6	457874-58-7	457874-59-8	457874-60-1
	457874-61-2	457874-62-3	457874-63-4	457874-64-5	457874-65-6
	457874-66-7	457874-67-8	457874-68-9	457874-69-0	457874-70-3
	457874-71-4	457874-72-5	457874-73-6	457874-74-7	457874-75-8
	457874-76-9	457874-77-0	457874-78-1	457874-79-2	457874-80-5
	457874-81-6	457874-82-7	457874-83-8	457874-84-9	457874-85-0
	457874-86-1	457874-87-2	457874-88-3	457874-89-4	457874-90-7
	457874-91-8	457874-92-9	457874-93-0	457874-94-1	457874-95-2
	457874-96-3	457874-97-4	457874-98-5	457874-99-6	457875-00-2
	457875-01-3	457875-02-4	457875-03-5	457875-04-6	457875-05-7
	457875-06-8	457875-07-9	457875-08-0	457875-09-1	457875-10-4

457875-11-5 457875-12-6 457875-13-7 457875-14-8 457875-15-9
 457875-16-0 457875-17-1 457875-18-2 457875-19-3 457875-20-6
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 457875-31-9 457875-32-0 457875-33-1 457875-34-2 457875-35-3
 457875-36-4 457875-37-5

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST
 (Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing
 protein or antibody therapeutic agent with reduced immunogenicity)

IT 457875-38-6 457875-39-7 457875-40-0 457875-41-1 457875-42-2
 457875-43-3 457875-44-4 457875-45-5 457875-46-6 457875-47-7
 457875-48-8 457875-49-9 457875-50-2 457875-51-3 457875-52-4
 457875-53-5 457875-54-6 457875-55-7 457875-56-8 457875-57-9
 457875-58-0 457875-59-1 457875-60-4 457875-61-5 457875-62-6
 457875-63-7 457875-64-8 457875-65-9 457875-66-0 457875-67-1
 457875-68-2 457875-69-3 457875-70-6 457875-71-7 457875-72-8
 457875-73-9 457875-74-0 457875-75-1 457875-76-2 457875-77-3
 457875-78-4 457875-79-5 457875-80-8 457875-81-9 457875-82-0
 457875-83-1 457875-84-2 457875-85-3 457875-86-4 457875-87-5
 457875-88-6 457875-89-7 457875-90-0 457875-91-1 457875-92-2
 457875-93-3 457875-94-4 457875-95-5 457875-96-6 457875-97-7
 457875-98-8 457875-99-9 457876-00-5 457876-01-6 457876-02-7
 457876-03-8 457876-04-9 457876-05-0 457876-06-1 457876-07-2
 457876-08-3 457876-09-4 457876-10-7 457876-11-8 457876-12-9
 457876-13-0 457876-14-1 457876-15-2 457876-16-3 457876-17-4
 457876-18-5 457876-19-6 457876-20-9 457876-21-0 457876-22-1
 457876-23-2 457876-24-3 457876-25-4 457876-26-5 457876-27-6
 457876-28-7 457876-29-8 457876-30-1 457876-31-2 457876-32-3
 457876-33-4 457876-34-5 457876-35-6 457876-36-7 457876-37-8
 457876-38-9 457876-39-0 457876-40-3 457876-41-4 457876-42-5
 457876-43-6 457876-44-7 457876-45-8 457876-46-9 457876-47-0
 457876-48-1 457876-49-2 457876-50-5 457876-51-6 457876-52-7
 457876-53-8 457876-54-9 457876-55-0 457876-56-1 457876-57-2
 457876-58-3 457876-59-4 457876-60-7 457876-61-8 457876-62-9
 457876-63-0 457876-64-1 457876-65-2 457876-66-3 457876-67-4
 457876-68-5 457876-69-6 457876-70-9 457876-71-0 457876-72-1
 457876-73-2 457876-74-3 457876-75-4 457876-76-5 457876-77-6
 457876-78-7 457876-79-8 457876-80-1 457876-81-2 457876-82-3
 457876-83-4 457876-84-5 457876-85-6 457876-86-7 457876-87-8
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 457876-93-6 457876-94-7 457876-95-8 457876-96-9 457876-97-0
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 457877-03-1 457877-04-2 457877-05-3 457877-06-4 457877-07-5
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 457877-18-8 457877-20-2 457877-22-4 457877-23-5 457877-24-6
 457877-25-7 457877-26-8 457877-27-9 457877-29-1 457877-30-4
 457877-31-5 457877-32-6 457877-33-7 457877-34-8 457877-35-9
 457877-36-0 457877-37-1 457877-38-2 457877-39-3 457877-40-6
 457877-41-7 457877-42-8 457877-43-9 457877-44-0 457877-45-1
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 457877-51-9 457877-52-0 457877-53-1 457877-54-2 457877-55-3
 457877-56-4 457877-57-5 457877-58-6 457877-59-7 457877-60-0
 457877-61-1 457877-62-2 457877-63-3 457877-64-4 457877-65-5
 457877-66-6 457877-67-7 457877-68-8 457877-69-9 457877-70-2
 457877-71-3 457877-72-4 457877-73-5 457877-74-6 457877-75-7

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST
 (Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing
 protein or antibody therapeutic agent with reduced immunogenicity)

IT 457877-76-8 457877-77-9 457877-78-0 457877-79-1 457877-80-4
 457877-81-5 457877-82-6 457877-83-7 457877-84-8 457877-85-9
 457877-86-0 457877-87-1 457877-88-2 457877-89-3 457877-90-6
 457877-91-7 457877-92-8 457877-93-9 457877-94-0 457877-95-1
 457877-96-2 457877-97-3 457877-98-4 457877-99-5 457878-00-1

457878-01-2	457878-02-3	457878-03-4	457878-04-5	457878-05-6
457878-06-7	457878-07-8	457878-08-9	457878-09-0	457878-10-3
457878-11-4	457878-12-5	457878-14-7	457878-16-9	457878-18-1
457878-19-2	457878-20-5	457878-21-6	457878-22-7	457878-23-8
457878-24-9	457878-25-0	457878-26-1	457878-27-2	457878-28-3
457878-29-4	457878-30-7	457878-31-8	457878-32-9	457878-33-0
457878-34-1	457878-35-2	457878-36-3	457878-37-4	457878-38-5
457878-39-6	457878-40-9	457878-41-0	457878-42-1	457878-43-2
457878-44-3	457878-45-4	457878-46-5	457878-47-6	457878-48-7
457878-49-8	457878-50-1	457878-51-2	457878-52-3	457878-53-4
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457878-59-0	457878-60-3	457878-61-4	457878-62-5	457878-63-6
457878-64-7	457878-65-8	457878-66-9	457878-67-0	457878-68-1
457878-69-2	457878-70-5	457878-71-6	457878-72-7	457878-73-8
457878-74-9	457878-75-0	457878-76-1	457878-77-2	457878-78-3
457878-79-4	457878-80-7	457878-81-8	457878-82-9	457878-83-0
457878-84-1	457878-85-2	457878-86-3	457878-87-4	457878-88-5
457878-89-6	457878-90-9	457878-91-0	457878-92-1	457878-93-2
457878-94-3	457878-95-4	457878-96-5	457878-97-6	457878-98-7
457878-99-8	457879-00-4	457879-01-5	457879-02-6	457879-03-7
457879-04-8	457879-05-9	457879-06-0	457879-07-1	457879-08-2
457879-09-3	457879-10-6	457879-11-7	457879-12-8	457879-13-9
457879-14-0	457879-15-1	457879-16-2	457879-17-3	457879-18-4
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457879-24-2	457879-25-3	457879-26-4	457879-27-5	457879-28-6
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457879-34-4	457879-35-5	457879-36-6	457879-37-7	457879-38-8
457879-39-9	457879-40-2	457879-41-3	457879-42-4	457879-43-5
457879-44-6	457879-45-7	457879-46-8	457879-47-9	457879-48-0
457879-49-1	457879-50-4	457879-51-5	457879-52-6	457879-53-7
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457879-59-3	457879-60-6	457879-61-7	457879-62-8	457879-63-9
457879-64-0	457879-65-1	457879-66-2	457879-67-3	457879-68-4
457879-69-5	457879-70-8	457879-71-9	457879-72-0	457879-73-1
457879-74-2	457879-75-3	457879-76-4	457879-77-5	457879-78-6
457879-79-7	457879-80-0	457879-81-1	457879-82-2	457879-83-3
457879-84-4	457879-85-5	457879-86-6	457879-87-7	457879-88-8
457879-89-9	457879-90-2	457879-91-3	457879-92-4	457879-93-5
457879-94-6	457879-95-7	457879-96-8	457879-97-9	457879-98-0
457879-99-1	457880-00-1	457880-01-2	457880-02-3	457880-03-4
457880-04-5	457880-05-6	457880-06-7	457880-07-8	457880-08-9
457880-09-0	457880-10-3	457880-11-4	457880-12-5	457880-13-6

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST (Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

IT	457880-14-7	457880-15-8	457880-16-9	457880-17-0	457880-18-1
	457880-19-2	457880-20-5	457880-21-6	457880-22-7	457880-23-8
	457880-24-9	457880-25-0	457880-26-1	457880-27-2	457880-28-3
	457880-29-4	457880-30-7	457880-31-8	457880-32-9	457880-33-0
	457880-34-1	457880-35-2	457880-36-3	457880-37-4	457880-38-5
	457880-39-6	457880-40-9	457880-41-0	457880-42-1	457880-43-2
	457880-44-3	457880-45-4	457880-46-5	457880-47-6	457880-48-7
	457880-49-8	457880-50-1	457880-51-2		

RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST (Analytical study); PROC (Process)

(computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)

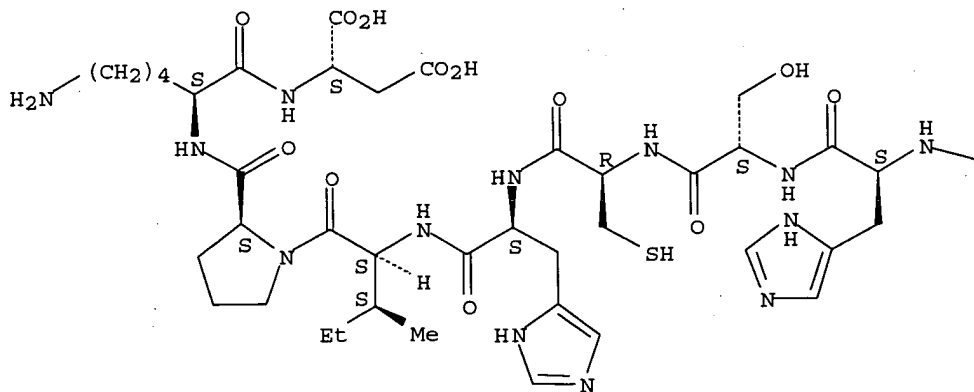
IT	9014-01-1DP, Subtilisin, T cell epitope-modified derivs.	9024-58-2DP, Glutamic acid decarboxylase, isoforms and T cell epitope-modified derivs.
	11096-26-7DP, Erythropoietin, T cell epitope-modified derivs.	37228-64-1DP, β -Glucocerebrosidase, T cell epitope-modified derivs.
	60202-16-6P, Protein C	83869-56-1DP, GM-CSF, T cell epitope-modified derivs.
	143011-72-7DP, G-CSF, T cell epitope-modified derivs.	169494-85-3DP, Leptin, T cell epitope-modified derivs.

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

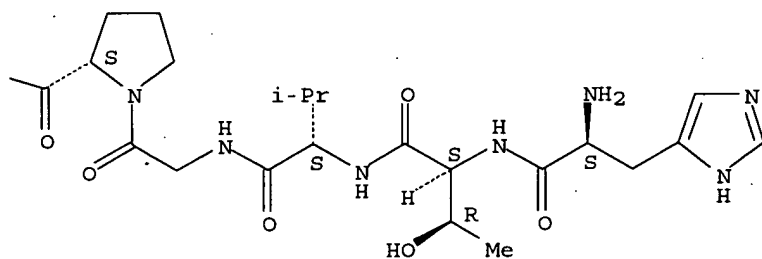
- PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT 126775-97-1D, Campath, T cell epitope-modified derivs. 152923-56-3D, Zenapax, T cell epitope-modified derivs. 174722-31-7D, Rituxan, T cell epitope-modified derivs. 180288-69-1D, Herceptin, T cell epitope-modified derivs. 185243-69-0D, Enbrel, T cell epitope-modified derivs. 192391-48-3D, Bexxar, T cell epitope-modified derivs.
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT 9002-68-ODP, Follicle stimulating hormone, T cell epitope-modified derivs.
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (human; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT 57-88-5, Cholesterol, biological studies
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (metabolic disease associated with; computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- IT 457873-85-7 457874-17-8 457874-75-8
 RL: ANT (Analyte); PRP (Properties); REM (Removal or disposal); ANST (Analytical study); PROC (Process)
 (computerized methods for identifying T cell epitope and use for preparing protein or antibody therapeutic agent with reduced immunogenicity)
- RN 457873-85-7 HCAPLUS
 CN L-Aspartic acid, L-histidyl-L-threonyl-L-valylglycyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-histidyl-L-isoleucyl-L-prolyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

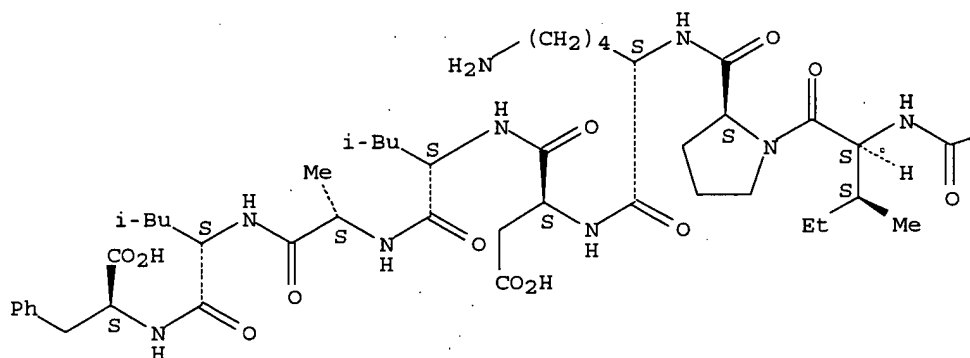


RN 457874-17-8 HCAPLUS

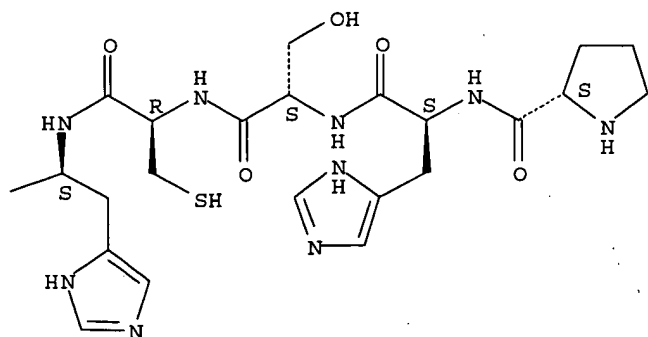
CN L-Phenylalanine, L-prolyl-L-histidyl-L-seryl-L-cysteiny-L-histidyl-L-isoleucyl-L-prolyl-L-lysyl-L-α-aspartyl-L-leucyl-L-alanyl-L-leucyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



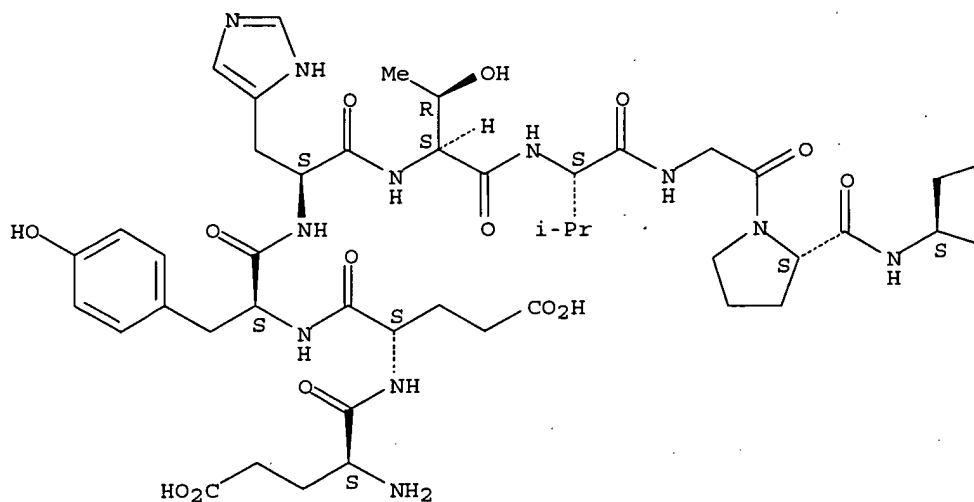
RN 457874-75-8 HCAPLUS

Search done by Noble Jarrell

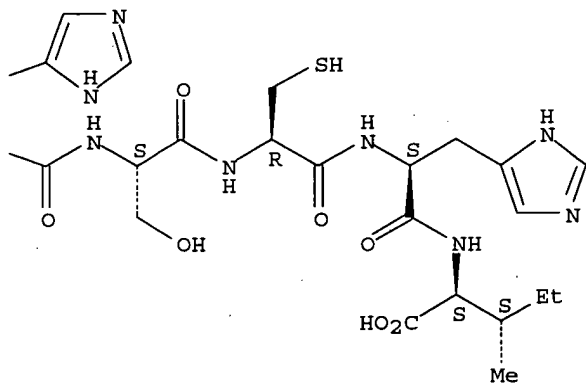
CN L-Isoleucine, L- α -glutamyl-L- α -glutamyl-L-tyrosyl-L-histidyl-L-threonyl-L-valylglycyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-histidyl-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:631705 HCAPLUS
 DN 138:297158
 ED Entered STN: 22 Aug 2002
 TI Suppression of Tumor Recurrence and Metastasis by a Combination of the
 PHSCN Sequence and the Antiangiogenic Compound Tetrathiomolybdate in
 Prostate Carcinoma
 AU van Golen, Kenneth L.; Bao, Liwei; Brewer, George J.; Pienta, Kenneth J.;
 Kamradt, Jeffrey M.; Livant, Donna L.; Merajver, Sofia D.
 CS Division of Hematology and Oncology, Department of Internal Medicine,
 University of Michigan Comprehensive Cancer Center, Ann Arbor, MI,

Search done by Noble Jarrell

48109-0948, USA

SO Neoplasia (New York, NY, United States) (2002), 4(5), 373-379
CODEN: NEOPFL; ISSN: 1522-8002

PB Nature Publishing Group

DT Journal

LA English

CC 1-6 (Pharmacology)

AB Plasma fibronectin-mediated invasion of human DU145 prostate cancer cell line was efficaciously inhibited in a rat tumor model by treatment with Ac-PHSCN-NH2 peptide. Invasion of DU145 cells was stimulated by the PHSRN sequence of plasma fibronectin. However, PHSCN acts as a competitive inhibitor of PHSRN-mediated invasion. In the current study, we determined whether PHSCN could inhibit the recurrence and metastasis of DU145 tumors after excision of the primary tumor in an athymic nude mouse model. We demonstrated that mice treated thrice weekly with i.v. Ac-PHSCN-NH2 peptide survived tumor-free for more than 30 wk post-primary tumor excision, whereas their untreated counterparts succumbed to recurrence and/or metastatic disease in significantly less time. Because of the universal requirement for angiogenesis in solid tumor growth, we tested the efficacy of copper deficiency induced by tetrathiomolybdate (TM) to retard tumor growth in the Dunning prostate cancer model. Significant reduction in size of the primary tumor was observed in mice rendered copper deficient. We sought to reduce tumor growth at the primary and metastatic sites by combining the anti-invasion Ac-PHSCN-NH2 peptide with TM. Improved survival, fewer metastatic lesions, and excellent tolerability were observed with the combination therapy.

ST PHSCN peptide antiangiogenic tetrathiomolybdate prostate carcinoma recurrence metastasis

IT Prostate gland, neoplasm
(carcinoma, metastasis; suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

IT Prostate gland, neoplasm
(carcinoma; suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

IT Carcinoma
(prostatic, metastasis; suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

IT Carcinoma
(prostatic; suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

IT Angiogenesis inhibitors
Antitumor agents
Drug interactions
Human
(suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

IT 7440-50-8, Copper, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(deficiency; efficacy of copper deficiency induced by tetrathiomolybdate (TM) to retard tumor growth in the Dunning prostate cancer model)

IT 16330-92-0 262438-43-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Allen, M; Hum Pathol 1998, V29, P311 MEDLINE

(2) American Cancer Society; Cancer Facts and Figures 2002

- (3) Livant, D; Cancer Res 1995, V55, P5085 HCAPLUS
- (4) Livant, D; Cancer Res 2000, V60, P309 HCAPLUS
- (5) Mosher, D; Annu Rev Med 1984, V35, P561 HCAPLUS
- (6) Nozue, M; Oncol Rep 2001, V8(6), P1247 MEDLINE
- (7) Partin, A; Urology 2001, V58, P843 MEDLINE
- (8) Rokhlin, O; Prostate 1995, V26, P205 HCAPLUS
- (9) Romanov, V; Prostate 1999, V39, P108 HCAPLUS
- (10) Schroder, J; Hepatogastroenterology 1998, V45, P1807 MEDLINE
- (11) Smith, D; Urol Clin North Am 1999, V26, P323 MEDLINE
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- (13) Uchiyama, A; Br J Cancer 1999, V81(4), P721 MEDLINE
- (14) van Golen, K; Clin Exp Metastasis 1996, V14, P95 HCAPLUS
- (15) Webber, M; Clin Cancer Res 1995, V1, P1089 MEDLINE
- (16) Witkowski, C; J Cancer Res Clin Oncol 1993, V119, P637 HCAPLUS
- (17) Zheng, D; Cancer Res 1999, V59, P1655 HCAPLUS

IT 262438-43-7

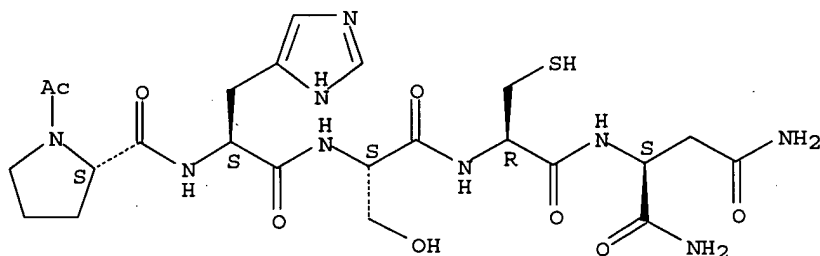
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(suppression of tumor recurrence and metastasis by a combination of
PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in
prostate carcinoma)

RN 262438-43-7 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:555761 HCAPLUS

DN 137:121939

ED Entered STN: 26 Jul 2002

TI Compositions and methods for the use of fibronectin fragments in the
diagnosis of cancer

IN Livant, Donna

PA The Regents of the University of Michigan, USA

SO PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N033-574

ICS A61K049-00; A61K051-00

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 14

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002057786	A2	20020725	WO 2002-US1189	20020115 <--
	WO 2002057786	A3	20031211		

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Search done by Noble Jarrell

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
 GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2435320 AA 20020725 CA 2002-2435320 20020115 <--
 EP 1388013 A2 20040211 EP 2002-713418 20020115 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 PRAI US 2001-765496 A 20010118 <--
 WO 2002-US1189 W 20020115 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002057786	ICM	G01N033-574
	ICS	A61K049-00; A61K051-00
WO 2002057786	ECLA	A61K051/08; G01N033/50D4; G01N033/574V4 <--
OS	MARPAT 137:121939	
AB	The present invention concerns the detection tumors in vivo, the imaging of tumors in vivo, and the imaging of cancerous tissue in pathol. samples. In particular the present invention incorporates the use of fibronectin fragments into these same detection and imaging methods.	
ST	fibronectin cancer diagnosis imaging blood culture peptide radioisotope fluorescent	
IT	Animal tissue (autopsy sample; compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Radiography (autoradiography; compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Animal tissue Blood analysis Blood plasma Blood serum Body fluid Diagnosis Epithelium Fibroblast Fluorescent substances Human Imaging Mammary gland, neoplasm Neoplasm Pathology Positron-emission tomography Prostate gland Rattus Sample preparation Scintigraphy (compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Peptides, uses Radionuclides, uses RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses) (compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Fibronectins RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (degradation products; compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Drug delivery systems (injections, i.v.; compns. and methods for use of fibronectin fragments in diagnosis of cancer)	
IT	Skin	

(keratinocyte; compns. and methods for use of fibronectin fragments in diagnosis of cancer)

IT Culture media
(serum-free; compns. and methods for use of fibronectin fragments in diagnosis of cancer)

IT Surgery
(tissue sample; compns. and methods for use of fibronectin fragments in diagnosis of cancer)

IT 252229-84-8P
RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(compns. and methods for use of fibronectin fragments in diagnosis of cancer)

IT 252230-05-0 262438-43-7 443305-20-2
443305-23-5
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(compns. and methods for use of fibronectin fragments in diagnosis of cancer)

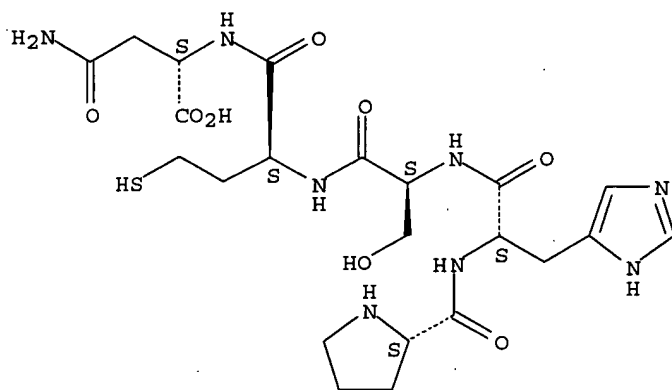
IT 252229-85-9P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compns. and methods for use of fibronectin fragments in diagnosis of cancer)

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252229-81-5 252229-82-6 252229-83-7
RL: PRP (Properties)
(unclaimed sequence; compns. and methods for the use of fibronectin fragments in the diagnosis of cancer)

IT 252230-05-0 262438-43-7 443305-20-2
443305-23-5
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(compns. and methods for use of fibronectin fragments in diagnosis of cancer)

RN 252230-05-0 HCAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-homocysteinyl- (9CI) (CA INDEX NAME)

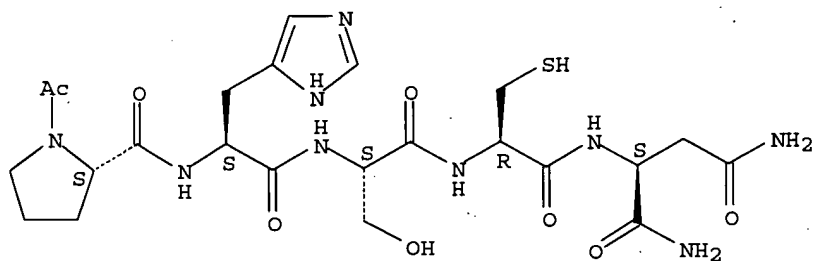
Absolute stereochemistry.



RN 262438-43-7 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI)
(CA INDEX NAME)

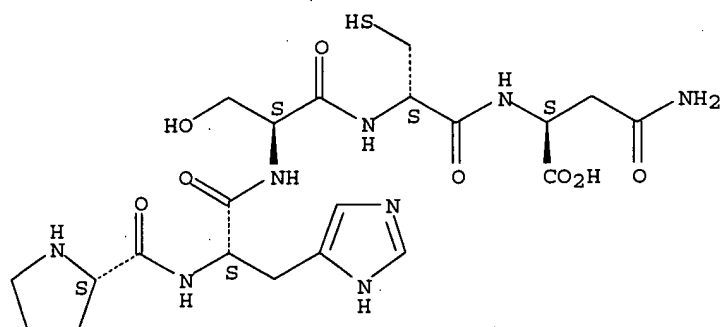
Absolute stereochemistry.



RN 443305-20-2 HCAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI) (CA INDEX NAME)

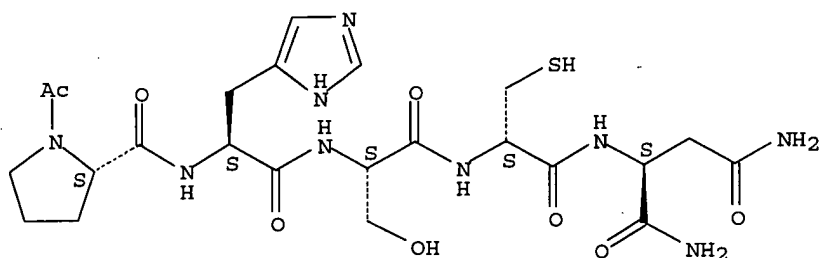
Absolute stereochemistry.



RN 443305-23-5 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



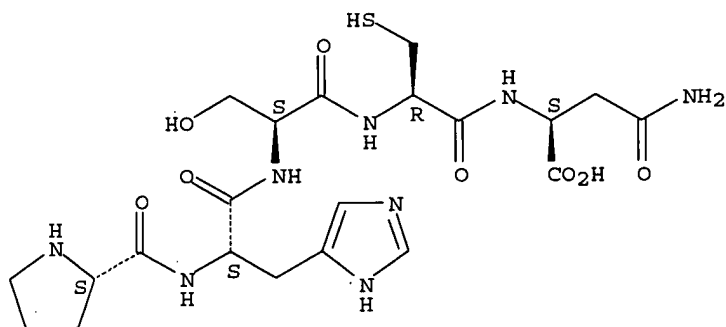
IT 252229-85-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(comps. and methods for use of fibronectin fragments in diagnosis of cancer)

RN 252229-85-9 HCAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:555624 HCAPLUS

DN 137:104821

ED Entered STN: 26 Jul 2002

TI Human nucleic acids encoding 50 human secreted proteins and their diagnostic and therapeutic uses

IN Moore, Paul A.; Ruben, Steven M.; Lafleur, David W.; Shi, Yanggu; Rosen, Craig A.; Olsen, Henrik; Ebner, Reinhard; Brewer, Laurie A.

PA Human Genome Sciences, Inc., USA

SO PCT Int. Appl., 785 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 1, 6, 13

FAN.CNT 43

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002057420	A2	20020725	WO 2002-US1109	20020117 <--
	WO 2002057420	A3	20021107		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				

Search done by Noble Jarrell

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
 TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-262066P P 20010118 <--

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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WO 2002057420 ICM C12N
WO 2002057420 ECLA C07K014/47 <--
AB The present invention relates to 50 novel human secreted proteins and
isolated nucleic acids containing the coding regions of the genes encoding
such proteins. Also provided are vectors, host cells, antibodies, and
recombinant methods for producing human secreted proteins. The invention
further relates to diagnostic and therapeutic methods useful for
diagnosing and treating diseases, disorders, and/or conditions related to
these novel human secreted proteins.
ST secreted protein cDNA sequence human
IT Genetic mapping
(chromosomal; human nucleic acids encoding 50 human secreted proteins
and their diagnostic and therapeutic uses)
IT Disease, animal
(diagnosis and treatment of secreted protein-associated; human nucleic
acids encoding 50 human secreted proteins and their diagnostic and
therapeutic uses)
IT Animal tissue
(gene expression specificity in; human nucleic acids encoding 50 human
secreted proteins and their diagnostic and therapeutic uses)
IT Drug screening
Epitopes
Human
Molecular cloning
Protein sequences
cDNA sequences
(human nucleic acids encoding 50 human secreted proteins and their
diagnostic and therapeutic uses)
IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic
use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(human nucleic acids encoding 50 human secreted proteins and their
diagnostic and therapeutic uses)
IT Gene, animal
RL: BSU (Biological study, unclassified); BUU (Biological use,
unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(human nucleic acids encoding 50 human secreted proteins and their
diagnostic and therapeutic uses)
IT Chromosome
(human, gene mapping on; human nucleic acids encoding 50 human secreted
proteins and their diagnostic and therapeutic uses)
IT Diagnosis
(mol.; human nucleic acids encoding 50 human secreted proteins and
their diagnostic and therapeutic uses)
IT Proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(secretory; human nucleic acids encoding 50 human secreted proteins and
their diagnostic and therapeutic uses)
IT 221104-60-5P 221104-61-6P 221104-62-7P 221104-63-8P 221104-64-9P
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RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; human nucleic acids encoding 50 human secreted
 proteins and their diagnostic and therapeutic uses)

IT 443375-82-4P 443375-83-5P 443375-84-6P 443375-85-7P 443375-86-8P
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RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)

(nucleotide sequence; human nucleic acids encoding 50 human secreted
 proteins and their diagnostic and therapeutic uses)

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RL: PRP (Properties)

(unclaimed sequence; human nucleic acids encoding 50 human secreted
 proteins and their diagnostic and therapeutic uses)

IT 443339-97-7

RL: PRP (Properties)

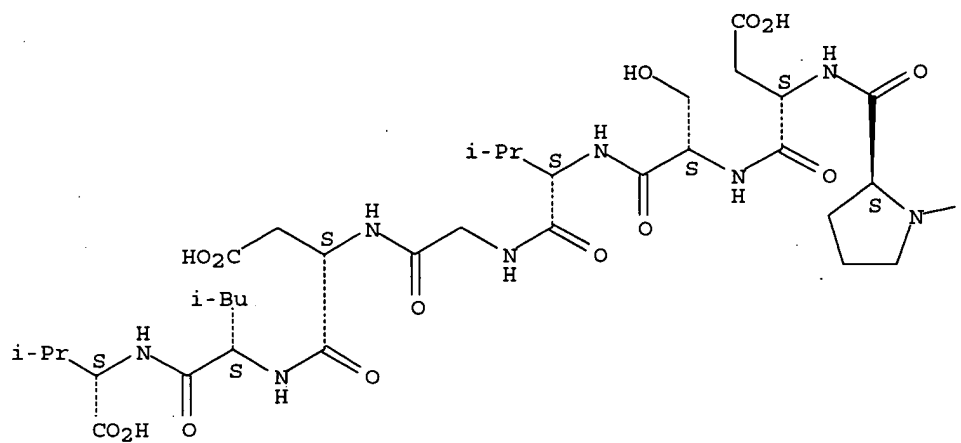
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RN 443339-97-7 HCAPLUS

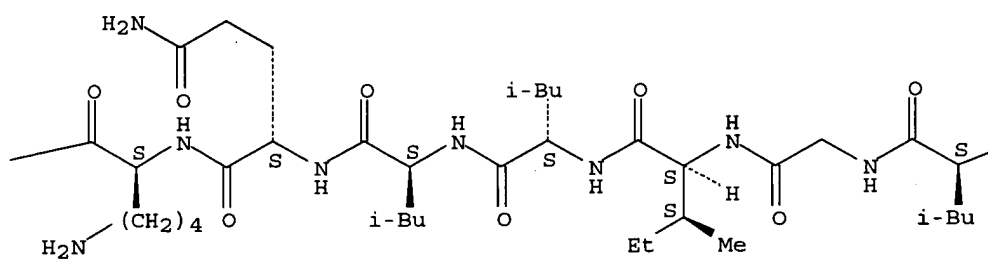
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Absolute stereochemistry.

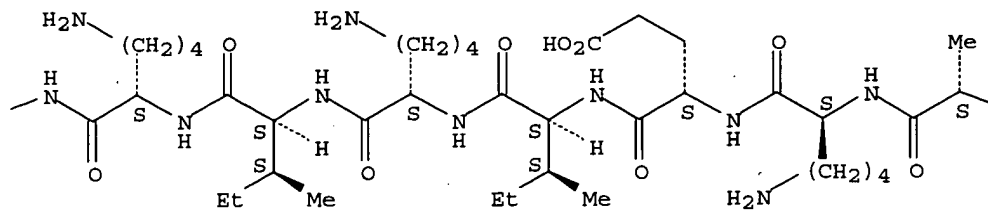
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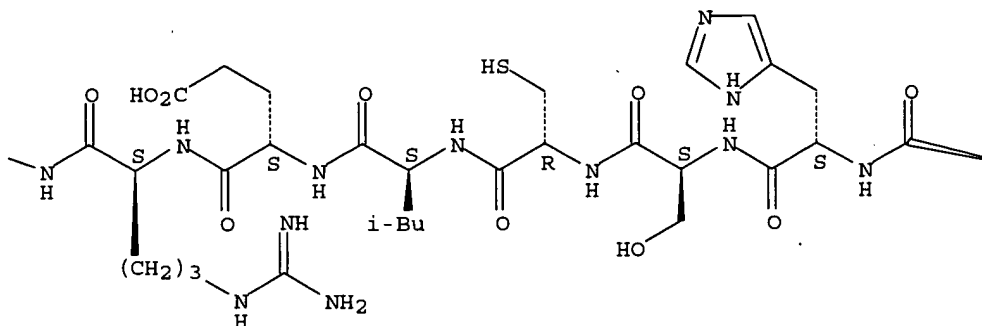
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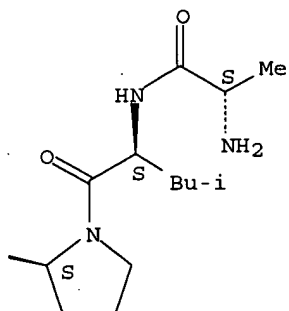
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PAGE 1-D



PAGE 1-E



L24 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:382317 HCAPLUS

DN 137:16534

ED Entered STN: 23 May 2002

TI Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human lung

IN Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PA Molecular Dynamics, Inc., USA

SO PCT Int. Appl., 634 pp.

CODEN: PIXXD2

DT Patent

LA English

IC C12Q001-68

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 6, 13

FAN.CNT 90

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Search done by Noble Jarrell

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CLASS

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 435/325.000; 514/044.000; 536/023.200
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AB A single exon nucleic acid microarray comprising 12,614 single exon
 nucleic acid probes for measuring gene expression in a sample derived from
 human lung cells is described. These unique exons are within longer probe
 sequences; sequencing confirms the exact chemical structure of each probe.
 Some amplicons have more than one exon, and some exons are contained in
 more than one amplicon. Expression, homol., and functional information
 are provided for the genome-derived single exon probes that are expressed
 significantly in human lung. Also described are 12,386 single exon
 nucleic acid probes and 12,011 proteins expressed in the lung and their
 use in methods for detecting gene expression. The genome-derived single
 exon nucleic acids comprise a novel type of nucleic acid microarray for
 verifying gene expression. In addition, methods are provided for identifying
 exons in a eukaryotic genome, and for assigning exons to a single gene.
 [This abstract record is one of nine records for this document necessitated
 by the large number of index entries required to fully index the document and
 publication system constraints.]

ST genome exon probe microarray gene expression human lung; sequence genome
 exon probe human lung

IT Genetic element
 RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (exon; human genome-derived single exon nucleic acid probes useful for
 anal. of gene expression in human lung)

IT DNA microarray technology
 DNA sequences
 Human
 Lung
 Protein sequences
 (human genome-derived single exon nucleic acid probes useful for anal.
 of gene expression in human lung)

IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (human genome-derived single exon nucleic acid probes useful for anal.
 of gene expression in human lung)

IT Peptides, biological studies
 RL: BSU (Biological study, unclassified); BUU (Biological use,
 unclassified); BIOL (Biological study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal.
 of gene expression in human lung)

IT Probes (nucleic acid)
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
 study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal.
 of gene expression in human lung)

IT Glass, uses
 Plastics, uses
 RL: DEV (Device component use); USES (Uses)
 (spatially addressable substrate; human genome-derived single exon
 nucleic acid probes useful for anal. of gene expression in human lung)

IT Lung

(toxicity; human genome-derived single exon nucleic acid probes useful
for anal. of gene expression in human lung)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

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400633-81-0	400633-83-2	400633-84-3	400633-85-4	400633-86-5
400633-87-6	400633-88-7	400633-89-8	400633-90-1	400633-91-2
400633-92-3	400633-93-4	400633-94-5	400633-95-6	400633-97-8
400634-00-6	400634-01-7	400634-03-9	400634-04-0	400634-05-1
400634-06-2	400634-07-3	400634-08-4	400634-10-8	400634-11-9
400634-12-0	400634-13-1	400634-14-2	400634-16-4	400634-17-5
400634-18-6	400634-19-7	400634-20-0	400634-21-1	400634-22-2
400634-25-5	400634-41-5	400634-42-6	400634-43-7	400634-44-8
400634-45-9	400634-46-0	400634-47-1	400634-48-2	400634-49-3
400634-50-6	400634-51-7	400634-52-8	400634-53-9	400634-54-0
400634-55-1	400634-56-2	400634-57-3	400634-58-4	400634-59-5
400634-60-8	400634-61-9	400634-62-0	400634-64-2	400634-65-3
400634-66-4	400634-68-6	400634-69-7	400634-70-0	400634-71-1
400634-72-2	400634-73-3	400634-74-4	400634-75-5	400634-76-6
400634-77-7	400634-78-8	400634-79-9	400634-80-2	400634-81-3
400634-82-4	400634-83-5	400634-84-6	400634-85-7	400634-86-8
400634-87-9	400634-88-0	400634-89-1	400634-90-4	400634-91-5
400634-93-7	400634-94-8	400634-95-9	400634-96-0	400634-97-1
400634-98-2	400634-99-3	400635-00-9	400635-01-0	400635-02-1
400635-03-2	400635-04-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	400635-05-4	400635-06-5	400635-07-6	400635-08-7	400635-09-8
	400635-10-1	400635-11-2	400635-12-3	400635-13-4	400635-14-5
	400635-15-6	400635-16-7	400635-17-8	400635-18-9	400635-19-0
	400635-20-3	400635-21-4	400635-22-5	400635-23-6	400635-24-7
	400635-25-8	400635-26-9	400635-27-0	400635-28-1	400635-29-2
	400635-30-5	400635-31-6	400635-32-7	400635-33-8	400635-34-9
	400635-35-0	400635-36-1	400635-37-2	400635-38-3	400635-39-4
	400635-40-7	400635-41-8	400635-42-9	400635-43-0	400635-44-1
	400635-45-2	400635-46-3	400635-49-6	400635-50-9	400635-51-0
	400635-52-1	400635-53-2	400635-54-3	400635-55-4	400635-56-5
	400635-59-8	400635-60-1	400635-63-4	400635-64-5	400635-66-7
	400635-67-8	400635-68-9	400635-69-0	400635-70-3	400635-71-4
	400635-72-5	400635-73-6	400635-74-7	400635-77-0	400635-79-2
	400635-81-6	400635-83-8	400635-84-9	400635-85-0	400635-87-2
	400635-88-3	400635-89-4	400635-90-7	400635-91-8	400635-92-9
	400635-93-0	400635-94-1	400635-95-2	400635-96-3	400635-97-4
	400635-98-5	400635-99-6	400636-00-2	400636-01-3	400636-02-4
	400636-03-5	400636-04-6	400636-05-7	400636-06-8	400636-07-9
	400636-08-0	400636-09-1	400636-10-4	400636-11-5	400636-12-6
	400636-13-7	400636-14-8	400636-15-9	400636-16-0	400636-17-1
	400636-18-2	400636-19-3	400636-20-6	400636-21-7	400636-22-8
	400636-23-9	400636-24-0	400636-25-1	400636-26-2	400636-27-3
	400636-28-4	400636-29-5	400636-30-8	400636-31-9	400636-32-0
	400636-33-1	400636-34-2	400636-35-3	400636-36-4	400636-37-5
	400636-39-7	400636-40-0	400636-41-1	400636-42-2	400636-43-3
	400636-44-4	400636-45-5	400636-46-6	400636-47-7	400636-48-8

400636-49-9	400636-50-2	400636-51-3	400636-52-4	400636-53-5
400636-54-6	400636-55-7	400636-56-8	400636-57-9	400636-58-0
400636-59-1	400636-60-4	400636-61-5	400636-62-6	400636-63-7
400636-64-8	400636-65-9	400636-66-0	400636-67-1	400636-68-2
400636-69-3	400636-70-6	400636-71-7	400636-72-8	400636-73-9
400636-74-0	400636-76-2	400636-77-3	400636-78-4	400636-79-5
400636-80-8	400636-81-9	400636-82-0	400636-83-1	400636-84-2
400636-85-3	400636-86-4	400636-87-5	400636-88-6	400636-89-7
400636-90-0	400636-91-1	400636-92-2	400636-93-3	400636-94-4
400636-95-5	400636-96-6	400636-97-7	400636-98-8	400636-99-9
400637-00-5	400637-01-6	400637-02-7	400637-03-8	400637-04-9
400637-05-0	400637-06-1	400637-07-2	400637-08-3	400637-09-4
400637-10-7	400637-11-8	400637-12-9	400637-13-0	400637-14-1
400637-15-2	400637-16-3	400637-17-4	400637-18-5	400637-19-6
400637-20-9	400637-21-0	400637-22-1	400637-23-2	400637-24-3
400637-25-4	400637-26-5	400637-27-6	400637-28-7	400637-29-8
400637-30-1	400637-31-2	400637-32-3	400637-33-4	400637-34-5
400637-35-6	400637-36-7	400637-37-8	400637-38-9	400637-39-0
400637-40-3	400637-41-4	400637-42-5	400637-43-6	400637-44-7
400637-45-8	400637-46-9	400637-47-0	400637-48-1	400637-49-2
400637-50-5	400637-51-6	400637-52-7	400637-53-8	400637-54-9
400637-55-0	400637-56-1			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	400637-57-2	400637-58-3	400637-59-4	400637-60-7	400637-61-8
	400637-62-9	400637-63-0	400637-64-1	400637-65-2	400637-66-3
	400637-67-4	400637-68-5	400637-69-6	400637-70-9	400637-71-0
	400637-72-1	400637-73-2	400637-74-3	400637-75-4	400637-76-5
	400637-77-6	400637-78-7	400637-79-8	400637-80-1	400637-81-2
	400637-82-3	400637-83-4	400637-84-5	400637-85-6	400637-86-7
	400637-87-8	400637-88-9	400637-89-0	400637-90-3	400637-91-4
	400637-92-5	400637-93-6	400637-94-7	400637-95-8	400637-96-9
	400637-97-0	400637-98-1	400637-99-2	400638-00-8	400638-01-9
	400638-02-0	400638-03-1	400638-04-2	400638-05-3	400638-06-4
	400638-07-5	400638-08-6	400638-09-7	400638-10-0	400638-11-1
	400638-12-2	400638-13-3	400638-14-4	400638-15-5	400638-16-6
	400638-17-7	400638-18-8	400638-19-9	400638-20-2	400638-21-3
	400638-22-4	400638-24-6	400638-25-7	400638-26-8	400638-27-9
	400638-28-0	400638-29-1	400638-31-5	400638-32-6	400638-33-7
	400638-34-8	400638-35-9	400638-36-0	400638-37-1	400638-38-2
	400638-39-3	400638-40-6	400638-41-7	400638-42-8	400638-43-9
	400638-44-0	400638-45-1	400638-46-2	400638-47-3	400638-48-4
	400638-49-5	400638-50-8	400638-51-9	400638-52-0	400638-53-1
	400638-54-2	400638-55-3	400638-56-4	400638-57-5	400638-58-6
	400638-59-7	400638-60-0	400638-61-1	400638-62-2	400638-63-3
	400638-64-4	400638-65-5	400638-66-6	400638-67-7	400638-68-8
	400638-69-9	400638-70-2	400638-71-3	400638-72-4	400638-73-5
	400638-74-6	400638-75-7	400638-76-8	400777-84-6	400777-91-5
	400777-98-2	400777-99-3	400778-00-9	400778-03-2	400778-29-2
	400778-41-8	400778-60-1	400778-61-2	400778-66-7	400778-70-3
	400778-71-4	400778-72-5	400778-73-6	400778-74-7	
	400778-77-0	400778-82-7	400778-84-9	400778-90-7	400778-91-8
	400778-92-9	400779-08-0	400867-50-7	400867-61-0	400867-86-9
	400868-15-7	400868-31-7	400868-63-5	400868-65-7	400868-73-7
	400868-80-6	400868-93-1	400869-31-0	400869-50-3	400869-68-3
	400869-76-3	400869-79-6	400869-81-0	400869-88-7	400870-02-2
	400870-12-4	400870-26-0	400870-36-2	400870-39-5	400870-43-1
	400870-60-2	400870-87-3	400870-89-5	401793-12-2	401793-24-6
	401796-48-3	401796-91-6	401797-44-2	401797-50-0	401797-67-9
	401798-07-0	401798-53-6	401798-66-1	401798-92-3	401799-03-9
	401800-33-7	401800-35-9	401800-60-0	401800-69-9	401800-81-5
	401800-90-6	401801-05-6	401801-33-0	401801-69-2	401801-80-7
	401801-84-1	401802-22-0	401802-30-0	401804-03-3	401804-25-9
	401893-49-0	401893-54-7	401893-55-8	401893-59-2	401893-61-6

401893-62-7	401893-63-8	401893-80-9	401893-81-0	401893-82-1
401893-83-2	401893-84-3	401893-85-4	401893-86-5	401893-89-8
401893-93-4	401893-95-6	401893-96-7	401893-98-9	401893-99-0
401894-00-6	401894-01-7	401894-02-8	401894-03-9	401894-04-0
401894-05-1	401894-09-5	401894-10-8	402469-99-2	403789-68-4
403789-69-5	405151-14-6	405151-24-8	419551-26-1	419551-87-4
421549-15-7	421549-28-2	421549-31-7	421549-33-9	421550-04-1
421550-38-1	421550-97-2	433490-89-2		

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433490-90-5	433490-91-6	433490-92-7	433490-93-8	433490-94-9
	433490-95-0	433490-96-1	433490-97-2	433490-98-3	433490-99-4
	433491-00-0	433491-01-1	433491-02-2	433491-03-3	433491-04-4
	433491-05-5	433491-06-6	433491-07-7	433491-08-8	433491-09-9
	433491-10-2	433491-11-3	433491-12-4	433491-13-5	433491-14-6
	433491-15-7	433491-16-8	433491-17-9	433491-18-0	433491-19-1
	433491-20-4	433491-21-5	433491-22-6	433491-23-7	433491-24-8
	433491-25-9	433491-26-0	433491-27-1	433491-28-2	433491-29-3
	433491-30-6	433491-31-7	433491-32-8	433491-33-9	433491-34-0
	433491-35-1	433491-36-2	433491-37-3	433491-38-4	433491-39-5
	433491-40-8	433491-41-9	433491-42-0	433491-43-1	433491-44-2
	433491-45-3	433491-46-4	433491-47-5	433491-48-6	433491-49-7
	433491-50-0	433491-51-1	433491-52-2	433491-53-3	433491-54-4
	433491-55-5	433491-56-6	433491-57-7	433491-58-8	433491-59-9
	433491-60-2	433491-61-3	433491-62-4	433491-63-5	433491-64-6
	433491-65-7	433491-66-8	433491-67-9	433491-68-0	433491-69-1
	433491-70-4	433491-71-5	433491-72-6	433491-73-7	433491-74-8
	433491-75-9	433491-76-0	433491-77-1	433491-78-2	433491-79-3
	433491-80-6	433491-81-7	433491-82-8	433491-83-9	433491-84-0
	433491-85-1	433491-86-2	433491-87-3	433491-88-4	433491-89-5
	433491-90-8	433491-91-9	433491-92-0	433491-93-1	433491-94-2
	433491-95-3	433491-96-4	433491-97-5	433491-98-6	433491-99-7
	433492-00-3	433492-01-4	433492-02-5	433492-03-6	433492-04-7
	433492-05-8	433492-06-9	433492-07-0	433492-08-1	433492-09-2
	433492-10-5	433492-11-6	433492-12-7	433492-13-8	433492-14-9
	433492-15-0	433492-16-1	433492-17-2	433492-18-3	433492-19-4
	433492-20-7	433492-21-8	433492-22-9	433492-23-0	433492-24-1
	433492-25-2	433492-26-3	433492-27-4	433492-28-5	433492-29-6
	433492-30-9	433492-31-0	433492-32-1	433492-33-2	433492-34-3
	433492-35-4	433492-36-5	433492-37-6	433492-38-7	433492-39-8
	433492-40-1	433492-41-2	433492-42-3	433492-43-4	433492-44-5
	433492-45-6	433492-46-7	433492-47-8	433492-48-9	433492-49-0
	433492-50-3	433492-51-4	433492-52-5	433492-53-6	433492-54-7
	433492-55-8	433492-56-9	433492-57-0	433492-58-1	433492-59-2
	433492-60-5	433492-61-6	433492-62-7	433492-63-8	433492-64-9
	433492-65-0	433492-66-1	433492-67-2	433492-68-3	433492-69-4
	433492-70-7	433492-71-8	433492-72-9	433492-73-0	433492-74-1
	433492-75-2	433492-76-3	433492-77-4	433492-78-5	433492-79-6
	433492-80-9	433492-81-0	433492-82-1	433492-83-2	433492-84-3
	433492-85-4	433492-86-5	433492-87-6	433492-88-7	433492-89-8
	433492-90-1	433492-91-2	433492-92-3	433492-93-4	433492-94-5
	433492-95-6	433492-96-7	433492-97-8	433492-98-9	433492-99-0
	433493-00-6	433493-01-7	433493-02-8	433493-03-9	433493-04-0
	433493-05-1	433493-06-2	433493-07-3	433493-08-4	433493-09-5
	433493-10-8	433493-11-9	433493-12-0	433493-13-1	433493-14-2
	433493-15-3	433493-16-4	433493-17-5	433493-18-6	433493-19-7
	433493-20-0	433493-21-1	433493-22-2	433493-23-3	433493-24-4
	433493-25-5	433493-26-6			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433493-27-7	433493-28-8	433493-29-9	433493-30-2	433493-31-3
	433493-32-4	433493-33-5	433493-34-6	433493-35-7	433493-36-8

433493-37-9	433493-38-0	433493-39-1	433493-40-4	433493-41-5
433493-42-6	433493-43-7	433493-44-8	433493-45-9	433493-46-0
433493-47-1	433493-48-2	433493-49-3	433493-50-6	433493-51-7
433493-52-8	433493-53-9	433493-54-0	433493-55-1	433493-56-2
433493-57-3	433493-58-4	433493-59-5	433493-60-8	433493-61-9
433493-62-0	433493-63-1	433493-64-2	433493-65-3	433493-66-4
433493-67-5	433493-68-6	433493-69-7	433493-70-0	433493-71-1
433493-72-2	433493-73-3	433493-74-4	433493-75-5	433493-76-6
433493-77-7	433493-78-8	433493-79-9	433493-80-2	433493-81-3
433493-82-4	433493-83-5	433493-84-6	433493-85-7	433493-86-8
433493-87-9	433493-88-0	433493-89-1	433493-90-4	433493-91-5
433493-92-6	433493-93-7	433493-94-8	433493-95-9	433493-96-0
433493-97-1	433493-98-2	433493-99-3	433494-00-9	433494-01-0
433494-02-1	433494-03-2	433494-04-3	433494-05-4	433494-06-5
433494-07-6	433494-08-7	433494-09-8	433494-10-1	433494-11-2
433494-12-3	433494-13-4	433494-14-5	433494-15-6	433494-16-7
433494-17-8	433494-18-9	433494-19-0	433494-20-3	433494-21-4
433494-22-5	433494-23-6	433494-24-7	433494-25-8	433494-26-9
433494-27-0	433494-28-1	433494-29-2	433494-30-5	433494-31-6
433494-32-7	433494-33-8	433494-34-9	433494-35-0	433494-36-1
433494-37-2	433494-38-3	433494-39-4	433494-40-7	433494-41-8
433494-42-9	433494-43-0	433494-44-1	433494-45-2	433494-46-3
433494-47-4	433494-48-5	433494-49-6	433494-50-9	433494-51-0
433494-52-1	433494-53-2	433494-54-3	433494-55-4	433494-56-5
433494-57-6	433494-58-7	433494-59-8	433494-60-1	433494-61-2
433494-62-3	433494-63-4	433494-64-5	433494-65-6	433494-66-7
433494-67-8	433494-68-9	433494-69-0	433494-70-3	433494-71-4
433494-72-5	433494-73-6	433494-74-7	433494-75-8	433494-76-9
433494-77-0	433494-78-1	433494-79-2	433494-80-5	433494-81-6
433494-82-7	433494-83-8	433494-84-9	433494-85-0	433494-86-1
433494-87-2	433494-88-3	433494-89-4	433494-90-7	433494-91-8
433494-92-9	433494-93-0	433494-94-1	433494-95-2	433494-96-3
433494-97-4	433494-98-5	433494-99-6	433495-00-2	433495-01-3
433495-02-4	433495-03-5	433495-04-6	433495-05-7	433495-06-8
433495-07-9	433495-08-0	433495-09-1	433495-10-4	433495-11-5
433495-12-6	433495-13-7	433495-14-8	433495-15-9	433495-16-0
433495-17-1	433495-18-2	433495-19-3	433495-20-6	433495-21-7
433495-22-8	433495-23-9	433495-24-0	433495-25-1	433495-26-2
433495-27-3	433495-28-4	433495-29-5	433495-30-8	433495-31-9
433495-32-0	433495-33-1	433495-34-2	433495-35-3	433495-36-4
433495-37-5	433495-38-6	433495-39-7	433495-40-0	433495-41-1
433495-42-2	433495-43-3	433495-44-4	433495-45-5	433495-46-6
433495-47-7	433495-48-8	433495-49-9	433495-50-2	433495-51-3
433495-52-4	433495-53-5	433495-54-6	433495-55-7	433495-56-8
433495-57-9	433495-58-0	433495-59-1	433495-60-4	433495-61-5
433495-62-6	433495-63-7			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433495-64-8	433495-65-9	433495-66-0	433495-67-1	433495-68-2
	433495-69-3	433495-70-6	433495-71-7	433495-72-8	433495-73-9
	433495-74-0	433495-75-1	433495-76-2	433495-77-3	433495-78-4
	433495-79-5	433495-80-8	433495-81-9	433495-82-0	433495-83-1
	433495-84-2	433495-85-3	433495-86-4	433495-87-5	433495-88-6
	433495-89-7	433495-90-0	433495-91-1	433495-92-2	433495-93-3
	433495-94-4	433495-95-5	433495-96-6	433495-97-7	433495-98-8
	433495-99-9	433496-00-5	433496-01-6	433496-02-7	433496-03-8
	433496-04-9	433496-05-0	433496-06-1	433496-07-2	433496-08-3
	433496-09-4	433496-10-7	433496-11-8	433496-12-9	433496-13-0
	433496-14-1	433496-15-2	433496-16-3	433496-17-4	433496-18-5
	433496-19-6	433496-20-9	433496-21-0	433496-22-1	433496-23-2
	433496-24-3	433496-25-4	433496-26-5	433496-27-6	433496-28-7
	433496-29-8	433496-30-1	433496-31-2	433496-32-3	433496-33-4
	433496-34-5	433496-35-6	433496-36-7	433496-37-8	433496-38-9
	433496-39-0	433496-40-3	433496-41-4	433496-42-5	433496-43-6

433496-44-7	433496-45-8	433496-46-9	433496-47-0	433496-48-1
433496-49-2	433496-50-5	433496-51-6	433496-52-7	433496-53-8
433496-54-9	433496-55-0	433496-56-1	433496-57-2	433496-58-3
433496-59-4	433496-60-7	433496-61-8	433496-62-9	433496-63-0
433496-64-1	433496-65-2	433496-66-3	433496-67-4	433496-68-5
433496-69-6	433496-70-9	433496-71-0	433496-72-1	433496-73-2
433496-74-3	433496-75-4	433496-76-5	433496-77-6	433496-78-7
433496-79-8	433496-80-1	433496-81-2	433496-82-3	433496-83-4
433496-84-5	433496-85-6	433496-86-7	433496-87-8	433496-88-9
433496-89-0	433496-90-3	433496-91-4	433496-92-5	433496-93-6
433496-94-7	433496-95-8	433496-96-9	433496-97-0	433496-98-1
433496-99-2	433497-00-8	433497-01-9	433497-02-0	433497-03-1
433497-04-2	433497-05-3	433497-06-4	433497-07-5	433497-08-6
433497-09-7	433497-10-0	433497-11-1	433497-12-2	433497-13-3
433497-14-4	433497-15-5	433497-16-6	433497-17-7	433497-18-8
433497-19-9	433497-20-2	433497-21-3	433497-22-4	433497-23-5
433497-24-6	433497-25-7	433497-26-8	433497-27-9	433497-28-0
433497-29-1	433497-30-4	433497-31-5	433497-32-6	433497-33-7
433497-34-8	433497-35-9	433497-36-0	433497-37-1	433497-38-2
433497-39-3	433497-40-6	433497-41-7	433497-42-8	433497-43-9
433497-44-0	433497-45-1	433497-46-2	433497-47-3	433497-48-4
433497-49-5	433497-50-8	433497-51-9	433497-52-0	433497-53-1
433497-54-2	433497-55-3	433497-56-4	433497-57-5	433497-58-6
433497-59-7	433497-60-0	433497-61-1	433497-62-2	433497-63-3
433497-64-4	433497-65-5	433497-66-6	433497-67-7	433497-68-8
433497-69-9	433497-70-2	433497-71-3	433497-72-4	433497-73-5
433497-74-6	433497-75-7	433497-76-8	433497-77-9	433497-78-0
433497-79-1	433497-80-4	433497-81-5	433497-82-6	433497-83-7
433497-84-8	433497-85-9	433497-86-0	433497-87-1	433497-88-2
433497-89-3	433497-90-6	433497-91-7	433497-92-8	433497-93-9
433497-94-0	433497-95-1	433497-96-2	433497-97-3	433497-98-4
433497-99-5	433498-00-1			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433498-01-2	433498-02-3	433498-03-4	433498-04-5	433498-05-6
	433498-06-7	433498-07-8	433498-08-9	433498-09-0	433498-10-3
	433498-11-4	433498-12-5	433498-13-6	433498-14-7	433498-15-8
	433498-16-9	433498-17-0	433498-18-1	433498-19-2	433498-20-5
	433498-21-6	433498-22-7	433498-23-8	433498-24-9	433498-25-0
	433498-26-1	433498-27-2	433498-28-3	433498-29-4	433498-30-7
	433498-31-8	433498-32-9	433498-33-0	433498-34-1	433498-35-2
	433498-36-3	433498-37-4	433498-38-5	433498-39-6	433498-40-9
	433498-41-0	433498-42-1	433498-43-2	433498-44-3	433498-45-4
	433498-46-5	433498-47-6	433498-48-7	433498-49-8	433498-50-1
	433498-51-2	433498-52-3	433498-53-4	433498-54-5	433498-55-6
	433498-56-7	433498-57-8	433498-58-9	433498-59-0	433498-60-3
	433498-61-4	433498-62-5	433498-63-6	433498-64-7	433498-65-8
	433498-66-9	433498-67-0	433498-68-1	433498-69-2	433498-70-5
	433498-71-6	433498-72-7	433498-73-8	433498-74-9	433498-75-0
	433498-76-1	433498-77-2	433498-78-3	433498-79-4	433498-80-7
	433498-81-8	433498-82-9	433498-83-0	433498-84-1	433498-85-2
	433498-86-3	433498-87-4	433498-88-5	433498-89-6	433498-90-9
	433498-91-0	433498-92-1	433498-93-2	433498-94-3	433498-95-4
	433498-96-5	433498-97-6	433498-98-7	433498-99-8	433499-00-4
	433499-01-5	433499-02-6	433499-03-7	433499-04-8	433499-05-9
	433499-06-0	433499-07-1	433499-08-2	433499-09-3	433499-10-6
	433499-11-7	433499-12-8	433499-13-9	433499-14-0	433499-15-1
	433499-16-2	433499-17-3	433499-18-4	433499-19-5	433499-20-8
	433499-21-9	433499-22-0	433499-23-1	433499-24-2	433499-25-3
	433499-26-4	433499-27-5	433499-28-6	433499-29-7	433499-30-0
	433499-31-1	433499-32-2	433499-33-3	433499-34-4	433499-35-5
	433499-36-6	433499-37-7	433499-38-8	433499-39-9	433499-40-2
	433499-41-3	433499-42-4	433499-43-5	433499-44-6	433499-45-7
	433499-46-8	433499-47-9	433499-48-0	433499-49-1	433499-50-4

433499-51-5	433499-52-6	433499-53-7	433499-54-8	433499-55-9
433499-56-0	433499-57-1	433499-58-2	433499-59-3	433499-60-6
433499-61-7	433499-62-8	433499-63-9	433499-64-0	433499-65-1
433499-66-2	433499-67-3	433499-68-4	433499-69-5	433499-70-8
433499-71-9	433499-72-0	433499-73-1	433499-74-2	433499-75-3
433499-76-4	433499-77-5	433499-78-6	433499-79-7	433499-80-0
433499-81-1	433499-82-2	433499-83-3	433499-84-4	433499-85-5
433499-86-6	433499-87-7	433499-88-8	433499-89-9	433499-90-2
433499-91-3	433499-92-4	433499-93-5	433499-94-6	433499-95-7
433499-96-8	433499-97-9	433499-98-0	433499-99-1	433500-00-6
433500-01-7	433500-02-8	433500-03-9	433500-04-0	433500-05-1
433500-06-2	433500-07-3	433500-08-4	433500-09-5	433500-10-8
433500-11-9	433500-12-0	433500-13-1	433500-14-2	433500-15-3
433500-16-4	433500-17-5	433500-18-6	433500-19-7	433500-20-0
433500-21-1	433500-22-2	433500-23-3	433500-24-4	433500-25-5
433500-26-6	433500-27-7	433500-28-8	433500-29-9	433500-30-2
433500-31-3	433500-32-4	433500-33-5	433500-34-6	433500-35-7
433500-36-8	433500-37-9			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human lung)

IT	433500-38-0	433500-39-1	433500-40-4	433500-41-5	433500-42-6
	433500-43-7	433500-44-8	433500-45-9	433500-46-0	433500-47-1
	433500-48-2	433500-49-3	433500-50-6	433500-51-7	433500-52-8
	433500-53-9	433500-54-0	433500-55-1	433500-56-2	433500-57-3
	433500-58-4	433500-59-5	433500-60-8	433500-61-9	433500-62-0
	433500-63-1	433500-64-2	433500-65-3	433500-66-4	433500-67-5
	433500-68-6	433500-69-7	433500-70-0	433500-71-1	433500-72-2
	433500-73-3	433500-74-4	433500-75-5	433500-76-6	433500-77-7
	433500-78-8	433500-79-9	433500-80-2	433500-81-3	433500-82-4
	433500-83-5	433500-84-6	433500-85-7	433500-86-8	433500-87-9
	433500-88-0	433500-89-1	433500-90-4	433500-91-5	433500-92-6
	433500-93-7	433500-94-8	433500-95-9	433500-96-0	433500-97-1
	433500-98-2	433500-99-3	433501-00-9	433501-01-0	433501-02-1
	433501-03-2	433501-04-3	433501-05-4	433501-06-5	433501-07-6
	433501-08-7	433501-09-8	433501-10-1	433501-11-2	433501-12-3
	433501-13-4	433501-14-5	433501-15-6	433501-16-7	433501-17-8
	433501-18-9	433501-19-0	433501-20-3	433501-21-4	433501-22-5
	433501-23-6	433501-24-7	433501-25-8	433501-26-9	433501-27-0
	433501-28-1	433501-29-2	433501-30-5	433501-31-6	433501-32-7
	433501-33-8	433501-34-9	433501-35-0	433501-36-1	433501-37-2
	433501-38-3	433501-39-4	433501-40-7	433501-41-8	433501-42-9
	433501-43-0	433501-44-1	433501-45-2	433501-46-3	433501-47-4
	433501-48-5	433501-49-6	433501-50-9	433501-51-0	433501-52-1
	433501-53-2	433501-54-3	433501-55-4	433501-56-5	433501-57-6
	433501-58-7	433501-59-8	433501-60-1	433501-61-2	433501-62-3
	433501-63-4	433501-64-5	433501-65-6	433501-66-7	433501-67-8
	433501-68-9	433501-69-0	433501-70-3	433501-71-4	433501-72-5
	433501-73-6	433501-74-7	433501-75-8	433501-76-9	433501-77-0
	433501-78-1	433501-79-2	433501-80-5	433501-81-6	433501-82-7
	433501-83-8	433501-84-9	433501-85-0	433501-86-1	433501-87-2
	433501-88-3	433501-89-4	433501-90-7	433501-91-8	433501-92-9
	433501-93-0	433501-94-1	433501-95-2	433501-96-3	433501-97-4
	433501-98-5	433501-99-6	433502-00-2	433502-01-3	433502-02-4
	433502-03-5	433502-04-6	433502-05-7	433502-06-8	433502-07-9
	433502-08-0	433502-09-1	433502-10-4	433502-11-5	433502-12-6
	433502-13-7	433502-14-8	433502-15-9	433502-16-0	433502-17-1
	433502-18-2	433502-19-3	433502-20-6	433502-21-7	433502-22-8
	433502-23-9	433502-24-0	433502-25-1	433502-26-2	433502-27-3
	433502-28-4	433502-29-5	433502-30-8	433502-31-9	433502-32-0
	433502-33-1	433502-34-2	433502-35-3	433502-36-4	433502-37-5
	433502-38-6	433502-39-7	433502-40-0	433502-41-1	433502-42-2
	433502-43-3	433502-44-4	433502-45-5	433502-46-6	433502-47-7
	433502-48-8	433502-49-9	433502-50-2	433502-51-3	433502-52-4
	433502-53-5	433502-54-6	433502-55-7	433502-56-8	433502-57-9

433502-58-0 433502-59-1 433502-60-4 433502-61-5 433502-62-6
 433502-63-7 433502-64-8 433502-65-9 433502-66-0 433502-67-1
 433502-68-2 433502-69-3 433502-70-6 433502-71-7 433502-72-8
 433502-73-9 433502-74-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human lung)

IT	433502-75-1	433502-76-2	433502-77-3	433502-78-4	433502-79-5
	433502-80-8	433502-81-9	433502-82-0	433502-83-1	433502-84-2
	433502-85-3	433502-86-4	433502-87-5	433502-88-6	433502-89-7
	433502-90-0	433502-91-1	433502-92-2	433502-93-3	433502-94-4
	433502-95-5	433502-96-6	433502-97-7	433502-98-8	433502-99-9
	433503-00-5	433503-01-6	433503-02-7	433503-03-8	433503-04-9
	433503-05-0	433503-06-1	433503-07-2	433503-08-3	433503-09-4
	433503-10-7	433503-11-8	433503-12-9	433503-13-0	433503-14-1
	433503-15-2	433503-16-3	433503-17-4	433503-18-5	433503-19-6
	433503-20-9	433503-21-0	433503-22-1	433503-23-2	433503-24-3
	433503-25-4	433503-26-5	433503-27-6	433503-28-7	433503-29-8
	433503-30-1	433503-31-2	433503-32-3	433503-33-4	433503-34-5
	433503-35-6	433503-36-7	433503-37-8	433503-38-9	433503-39-0
	433503-40-3	433503-41-4	433503-42-5	433503-43-6	433503-44-7
	433503-45-8	433503-46-9	433503-47-0	433503-48-1	433503-49-2
	433503-50-5	433503-51-6	433503-52-7	433503-53-8	433503-54-9
	433503-55-0	433503-56-1	433503-57-2	433503-58-3	433503-59-4
	433503-60-7	433503-61-8	433503-62-9	433503-63-0	433503-64-1
	433503-65-2	433503-66-3	433503-67-4	433503-68-5	433503-69-6
	433503-70-9	433503-71-0	433503-72-1	433503-73-2	433503-74-3
	433503-75-4	433503-76-5	433503-77-6	433503-78-7	433503-79-8
	433503-80-1	433503-81-2	433503-82-3	433503-83-4	433503-84-5
	433503-85-6	433503-86-7	433503-87-8	433503-88-9	433503-89-0
	433503-90-3	433503-91-4	433503-92-5	433503-93-6	433503-94-7
	433503-95-8	433503-96-9	433503-97-0	433503-98-1	433503-99-2
	433504-00-8	433504-01-9	433504-02-0	433504-03-1	433504-04-2
	433504-05-3	433504-06-4	433504-07-5	433504-08-6	433504-09-7
	433504-10-0	433504-11-1	433504-12-2	433504-13-3	433504-14-4
	433504-15-5	433504-16-6	433504-17-7	433504-18-8	433504-19-9
	433504-20-2	433504-21-3	433504-22-4	433504-23-5	433504-24-6
	433504-25-7	433504-26-8	433504-27-9	433504-28-0	433504-29-1
	433504-30-4	433504-31-5	433504-32-6	433504-33-7	433504-34-8
	433504-35-9	433504-36-0	433504-37-1	433504-38-2	433504-39-3
	433504-40-6	433504-41-7	433504-42-8	433504-43-9	433504-44-0
	433504-45-1	433504-46-2	433504-47-3	433504-48-4	433504-49-5
	433504-50-8	433504-51-9	433504-52-0	433504-53-1	433504-54-2
	433504-55-3	433504-56-4	433504-57-5	433504-58-6	433504-59-7
	433504-60-0	433504-61-1	433504-62-2	433504-63-3	433504-64-4
	433504-65-5	433504-66-6	433504-67-7	433504-68-8	433504-69-9
	433504-70-2	433504-71-3	433504-72-4	433504-73-5	433504-74-6
	433504-75-7	433504-76-8	433504-77-9	433504-78-0	433504-79-1
	433504-80-4	433504-81-5	433504-82-6	433504-83-7	433504-84-8
	433504-85-9	433504-86-0	433504-87-1	433504-88-2	433504-89-3
	433504-90-6	433504-91-7	433504-92-8	433504-93-9	433504-94-0
	433504-95-1	433504-96-2	433504-97-3	433504-98-4	433504-99-5
	433505-00-1	433505-01-2	433505-02-3	433505-03-4	433505-04-5
	433505-05-6	433505-06-7	433505-07-8	433505-08-9	433505-09-0
	433505-10-3	433505-11-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human lung)

IT	433505-12-5	433505-13-6	433505-14-7	433505-15-8	433505-16-9
	433505-17-0	433505-18-1	433505-19-2	433505-20-5	433505-21-6
	433505-22-7	433505-23-8	433505-24-9	433505-25-0	433505-26-1
	433505-27-2	433505-28-3	433505-29-4	433505-30-7	433505-31-8
	433505-32-9	433505-33-0	433505-34-1	433505-35-2	433505-36-3
	433505-37-4	433505-38-5	433505-39-6	433505-40-9	433505-41-0

433505-42-1	433505-43-2	433505-44-3	433505-45-4	433505-46-5
433505-47-6	433505-48-7	433505-49-8	433505-50-1	433505-51-2
433505-52-3	433505-53-4	433505-54-5	433505-55-6	433505-56-7
433505-57-8	433505-58-9	433505-59-0	433505-60-3	433505-61-4
433505-62-5	433505-63-6	433505-64-7	433505-65-8	433505-66-9
433505-67-0	433505-68-1	433505-69-2	433505-70-5	433505-71-6
433505-72-7	433505-73-8	433505-74-9	433505-75-0	433505-76-1
433505-77-2	433505-78-3	433505-79-4	433505-80-7	433505-81-8
433505-82-9	433505-83-0	433505-84-1	433505-85-2	433505-86-3
433505-87-4	433505-88-5	433505-89-6	433505-90-9	433505-91-0
433505-92-1	433505-93-2	433505-94-3	433505-95-4	433505-96-5
433505-97-6	433505-98-7	433505-99-8	433506-00-4	433506-01-5
433506-02-6	433506-03-7	433506-04-8	433506-05-9	433506-06-0
433506-07-1	433506-08-2	433506-09-3	433506-10-6	433506-11-7
433506-12-8	433506-13-9	433506-14-0	433506-15-1	433506-16-2
433506-17-3	433506-18-4	433506-19-5	433506-20-8	433506-21-9
433506-22-0	433506-23-1	433506-24-2	433506-25-3	433506-26-4
433506-27-5	433506-28-6	433506-29-7	433506-30-0	433506-31-1
433506-32-2	433506-33-3	433506-34-4	433506-35-5	433506-36-6
433506-37-7	433506-38-8	433506-39-9	433506-40-2	433506-41-3
433506-42-4	433506-43-5	433506-44-6	433506-45-7	433506-46-8
433506-47-9	433506-48-0	433506-49-1	433506-50-4	433506-51-5
433506-52-6	433506-53-7	433506-54-8	433506-55-9	433506-56-0
433506-57-1	433506-58-2	433506-59-3	433506-60-6	433506-61-7
433506-62-8	433506-63-9	433506-64-0	433506-65-1	433506-66-2
433506-67-3	433506-68-4	433506-69-5	433506-70-8	433506-71-9
433506-72-0	433506-73-1	433506-74-2	433506-75-3	433506-76-4
433506-77-5	433506-78-6	433506-79-7	433506-80-0	433506-81-1
433506-82-2	433506-83-3	433506-84-4	433506-85-5	433506-86-6
433506-87-7	433506-88-8	433506-89-9	433506-90-2	433506-91-3
433506-92-4	433506-93-5	433506-94-6	433506-95-7	433506-96-8
433506-97-9	433506-98-0	433506-99-1	433507-00-7	433507-01-8
433507-02-9	433507-03-0	433507-04-1	433507-05-2	433507-06-3
433507-07-4	433507-08-5	433507-09-6	433507-10-9	433507-11-0
433507-12-1	433507-13-2	433507-14-3	433507-15-4	433507-16-5
433507-17-6	433507-18-7	433507-19-8	433507-20-1	433507-21-2
433507-22-3	433507-23-4	433507-24-5	433507-25-6	433507-26-7
433507-27-8	433507-28-9	433507-29-0	433507-30-3	433507-31-4
433507-32-5	433507-33-6	433507-34-7	433507-35-8	433507-36-9
433507-37-0	433507-38-1	433507-39-2	433507-40-5	433507-41-6
433507-42-7	433507-43-8	433507-44-9	433507-45-0	433507-46-1
433507-47-2	433507-48-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433507-49-4	433507-50-7	433507-51-8	433507-52-9	433507-53-0
	433507-54-1	433507-55-2	433507-56-3	433507-57-4	433507-58-5
	433507-59-6	433507-60-9	433507-61-0	433507-62-1	433507-63-2
	433507-64-3	433507-65-4	433507-66-5	433507-67-6	433507-68-7
	433507-69-8	433507-70-1	433507-71-2	433507-72-3	433507-73-4
	433507-74-5	433507-75-6	433507-76-7	433507-77-8	433507-78-9
	433507-79-0	433507-80-3	433507-81-4	433507-82-5	433507-83-6
	433507-84-7	433507-85-8	433507-86-9	433507-87-0	433507-88-1
	433507-89-2	433507-90-5	433507-91-6	433507-92-7	433507-93-8
	433507-94-9	433507-95-0	433507-96-1	433507-97-2	433507-98-3
	433507-99-4	433508-00-0	433508-01-1	433508-02-2	433508-03-3
	433508-04-4	433508-05-5	433508-06-6	433508-07-7	433508-08-8
	433508-09-9	433508-10-2	433508-11-3	433508-12-4	433508-13-5
	433508-14-6	433508-15-7	433508-16-8	433508-17-9	433508-18-0
	433508-19-1	433508-20-4	433508-21-5	433508-22-6	433508-23-7
	433508-24-8	433508-25-9	433508-26-0	433508-27-1	433508-28-2
	433508-29-3	433508-30-6	433508-31-7	433508-32-8	433508-33-9
	433508-34-0	433508-35-1	433508-36-2	433508-37-3	433508-38-4
	433508-39-5	433508-40-8	433508-41-9	433508-42-0	433508-43-1
	433508-44-2	433508-45-3	433508-46-4	433508-47-5	433508-48-6

433508-49-7	433508-50-0	433508-51-1	433508-52-2	433508-53-3
433508-54-4	433508-55-5	433508-56-6	433508-57-7	433508-58-8
433508-59-9	433508-60-2	433508-61-3	433508-62-4	433508-63-5
433508-64-6	433508-65-7	433508-66-8	433508-67-9	433508-68-0
433508-69-1	433508-70-4	433508-71-5	433508-72-6	433508-73-7
433508-74-8	433508-75-9	433508-76-0	433508-77-1	433508-78-2
433508-79-3	433508-80-6	433508-81-7	433508-82-8	433508-83-9
433508-84-0	433508-85-1	433508-86-2	433508-87-3	433508-88-4
433508-89-5	433508-90-8	433508-91-9	433508-92-0	433508-93-1
433508-94-2	433508-95-3	433508-96-4	433508-97-5	433508-98-6
433508-99-7	433509-00-3	433509-01-4	433509-02-5	433509-03-6
433509-04-7	433509-05-8	433509-06-9	433509-07-0	433509-08-1
433509-09-2	433509-10-5	433509-11-6	433509-12-7	433509-13-8
433509-14-9	433509-15-0	433509-16-1	433509-17-2	433509-18-3
433509-19-4	433509-20-7	433509-21-8	433509-22-9	433509-23-0
433509-24-1	433509-25-2	433509-26-3	433509-27-4	433509-28-5
433509-29-6	433509-30-9	433509-31-0	433509-32-1	433509-33-2
433509-34-3	433509-35-4	433509-36-5	433509-37-6	433509-38-7
433509-39-8	433509-40-1	433509-41-2	433509-42-3	433509-43-4
433509-44-5	433509-45-6	433509-46-7	433509-47-8	433509-48-9
433509-49-0	433509-50-3	433509-51-4	433509-52-5	433509-53-6
433509-54-7	433509-55-8	433509-56-9	433509-57-0	433509-58-1
433509-59-2	433509-60-5	433509-61-6	433509-62-7	433509-63-8
433509-64-9	433509-65-0	433509-66-1	433509-67-2	433509-68-3
433509-69-4	433509-70-7	433509-71-8	433509-72-9	433509-73-0
433509-74-1	433509-75-2	433509-76-3	433509-77-4	433509-78-5
433509-79-6	433509-80-9	433509-81-0	433509-82-1	433509-83-2
433509-84-3	433509-85-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433509-86-5	433509-87-6	433509-88-7	433509-89-8	433509-90-1
	433509-91-2	433509-92-3	433509-93-4	433509-94-5	433509-95-6
	433509-96-7	433509-97-8	433509-98-9	433509-99-0	433510-00-0
	433510-01-1	433510-02-2	433510-03-3	433510-04-4	433510-05-5
	433510-06-6	433510-07-7	433510-08-8	433510-09-9	433510-10-2
	433510-11-3	433510-12-4	433510-13-5	433510-14-6	433510-15-7
	433510-16-8	433510-17-9	433510-18-0	433510-19-1	433510-20-4
	433510-21-5	433510-22-6	433510-23-7	433510-24-8	433510-25-9
	433510-26-0	433510-27-1	433510-28-2	433510-29-3	433510-30-6
	433510-31-7	433510-32-8	433510-33-9	433510-34-0	433510-35-1
	433510-36-2	433510-37-3	433510-38-4	433510-39-5	433510-40-8
	433510-41-9	433510-42-0	433510-43-1	433510-44-2	433510-45-3
	433510-46-4	433510-47-5	433510-48-6	433510-49-7	433510-50-0
	433510-51-1	433510-52-2	433510-53-3	433510-54-4	433510-55-5
	433510-56-6	433510-57-7	433510-58-8	433510-59-9	433510-60-2
	433510-61-3	433510-62-4	433510-63-5	433510-64-6	433510-65-7
	433510-66-8	433510-67-9	433510-68-0	433510-69-1	433510-70-4
	433510-71-5	433510-72-6	433510-73-7	433510-74-8	433510-75-9
	433510-76-0	433510-77-1	433510-78-2	433510-79-3	433510-80-6
	433510-81-7	433510-82-8	433510-83-9	433510-84-0	433510-85-1
	433510-86-2	433510-87-3	433510-88-4	433510-89-5	433510-90-8
	433510-91-9	433510-92-0	433510-93-1	433510-94-2	433510-95-3
	433510-96-4	433510-97-5	433510-98-6	433510-99-7	433511-00-3
	433511-01-4	433511-02-5	433511-03-6	433511-04-7	433511-05-8
	433511-06-9	433511-07-0	433511-08-1	433511-09-2	433511-10-5
	433511-11-6	433511-12-7	433511-13-8	433511-14-9	433511-15-0
	433511-16-1	433511-17-2	433511-18-3	433511-19-4	433511-20-7
	433511-21-8	433511-22-9	433511-23-0	433511-24-1	433511-25-2
	433511-26-3	433511-27-4	433511-28-5	433511-29-6	433511-30-9
	433511-31-0	433511-32-1	433511-33-2	433511-34-3	433511-35-4
	433511-36-5	433511-37-6	433511-38-7	433511-39-8	433511-40-1
	433511-41-2	433511-42-3	433511-43-4	433511-44-5	433511-45-6
	433511-46-7	433511-47-8	433511-48-9	433511-49-0	433511-50-3
	433511-51-4	433511-52-5	433511-53-6	433511-54-7	433511-55-8

433511-56-9	433511-57-0	433511-58-1	433511-59-2	433511-60-5
433511-61-6	433511-62-7	433511-63-8	433511-64-9	433511-65-0
433511-66-1	433511-67-2	433511-68-3	433511-69-4	433511-70-7
433511-71-8	433511-72-9	433511-73-0	433511-74-1	433511-75-2
433511-76-3	433511-77-4	433511-78-5	433511-79-6	433511-80-9
433511-81-0	433511-82-1	433511-83-2	433511-84-3	433511-85-4
433511-86-5	433511-87-6	433511-88-7	433511-89-8	433511-90-1
433511-91-2	433511-92-3	433511-93-4	433511-94-5	433511-95-6
433511-96-7	433511-97-8	433511-98-9	433511-99-0	433512-00-6
433512-01-7	433512-02-8	433512-03-9	433512-04-0	433512-05-1
433512-06-2	433512-07-3	433512-08-4	433512-09-5	433512-10-8
433512-11-9	433512-12-0	433512-13-1	433512-14-2	433512-15-3
433512-16-4	433512-17-5	433512-18-6	433512-19-7	433512-20-0
433512-21-1	433512-22-2			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433512-23-3	433512-24-4	433512-25-5	433512-26-6	433512-27-7
	433512-28-8	433512-29-9	433512-30-2	433512-31-3	433512-32-4
	433512-33-5	433512-34-6	433512-35-7	433512-36-8	433512-37-9
	433512-38-0	433512-39-1	433512-40-4	433512-41-5	433512-42-6
	433512-43-7	433512-44-8	433512-45-9	433512-46-0	433512-47-1
	433512-48-2	433512-49-3	433512-50-6	433512-51-7	433512-52-8
	433512-53-9	433512-54-0	433512-55-1	433512-56-2	433512-57-3
	433512-58-4	433512-59-5	433512-60-8	433512-61-9	433512-62-0
	433512-63-1	433512-64-2	433512-65-3	433512-66-4	433512-67-5
	433512-68-6	433512-69-7	433512-70-0	433512-71-1	433512-72-2
	433512-73-3	433512-74-4	433512-75-5	433512-76-6	433512-77-7
	433512-78-8	433512-79-9	433512-80-2	433512-81-3	433512-82-4
	433512-83-5	433512-84-6	433512-85-7	433512-86-8	433512-87-9
	433512-88-0	433512-89-1	433512-90-4	433512-91-5	433512-92-6
	433512-93-7	433512-94-8	433512-95-9	433512-96-0	433512-97-1
	433512-98-2	433512-99-3	433513-00-9	433513-01-0	433513-02-1
	433513-03-2	433513-04-3	433513-05-4	433513-06-5	433513-07-6
	433513-08-7	433513-09-8	433513-10-1	433513-11-2	433513-12-3
	433513-13-4	433513-14-5	433513-15-6	433513-16-7	433513-17-8
	433513-18-9	433513-19-0	433513-20-3	433513-21-4	433513-22-5
	433513-23-6	433513-24-7	433513-25-8	433513-26-9	433513-27-0
	433513-28-1	433513-29-2	433513-30-5	433513-31-6	433513-32-7
	433513-33-8	433513-34-9	433513-35-0	433513-36-1	433513-37-2
	433513-38-3	433513-39-4	433513-40-7	433513-41-8	433513-42-9
	433513-43-0	433513-44-1	433513-45-2	433513-46-3	433513-47-4
	433513-48-5	433513-49-6	433513-50-9	433513-51-0	433513-52-1
	433513-53-2	433513-54-3	433513-55-4	433513-56-5	433513-57-6
	433513-58-7	433513-59-8	433513-60-1	433513-61-2	433513-62-3
	433513-63-4	433513-64-5	433513-65-6	433513-66-7	433513-67-8
	433513-68-9	433513-69-0	433513-70-3	433513-71-4	433513-72-5
	433513-73-6	433513-74-7	433513-75-8	433513-76-9	433513-77-0
	433513-78-1	433513-79-2	433513-80-5	433513-81-6	433513-82-7
	433513-83-8	433513-84-9	433513-85-0	433513-86-1	433513-87-2
	433513-88-3	433513-89-4	433513-90-7	433513-91-8	433513-92-9
	433513-93-0	433513-94-1	433513-95-2	433513-96-3	433513-97-4
	433513-98-5	433513-99-6	433514-00-2	433514-01-3	433514-02-4
	433514-03-5	433514-04-6	433514-05-7	433514-06-8	433514-07-9
	433514-08-0	433514-09-1	433514-10-4	433514-11-5	433514-12-6
	433514-13-7	433514-14-8	433514-15-9	433514-16-0	433514-17-1
	433514-18-2	433514-19-3	433514-20-6	433514-21-7	433514-22-8
	433514-23-9	433514-24-0	433514-25-1	433514-26-2	433514-27-3
	433514-28-4	433514-29-5	433514-30-8	433514-31-9	433514-32-0
	433514-33-1	433514-34-2	433514-35-3	433514-36-4	433514-37-5
	433514-38-6	433514-39-7	433514-40-0	433514-41-1	433514-42-2
	433514-43-3	433514-44-4	433514-45-5	433514-46-6	433514-47-7
	433514-48-8	433514-49-9	433514-50-2	433514-51-3	433514-52-4
	433514-53-5	433514-54-6	433514-55-7	433514-56-8	433514-57-9
	433514-58-0	433514-59-1			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT	433514-60-4	433514-61-5	433514-62-6	433514-63-7	433514-64-8
	433514-65-9	433514-66-0	433514-67-1	433514-68-2	433514-69-3
	433514-70-6	433514-71-7	433514-72-8	433514-73-9	433514-74-0
	433514-75-1	433514-76-2	433514-77-3	433514-78-4	433514-79-5
	433514-80-8	433514-81-9	433514-82-0	433514-83-1	433514-84-2
	433514-85-3	433514-86-4	433514-87-5	433514-88-6	433514-89-7
	433514-90-0	433514-91-1	433514-92-2	433514-93-3	433514-94-4
	433514-95-5	433514-96-6	433514-97-7	433514-98-8	433514-99-9
	433515-00-5	433515-01-6	433515-02-7	433515-03-8	433515-04-9
	433515-05-0	433515-06-1	433515-07-2	433515-08-3	433515-09-4
	433515-10-7	433515-11-8	433515-12-9	433515-13-0	433515-14-1
	433515-15-2	433515-16-3	433515-17-4	433515-18-5	433515-19-6
	433515-20-9	433515-21-0	433515-22-1	433515-23-2	433515-24-3
	433515-25-4	433515-26-5	433515-27-6	433515-28-7	433515-29-8
	433515-30-1	433515-31-2	433515-32-3	433515-33-4	433515-34-5
	433515-35-6	433515-36-7	433515-37-8	433515-38-9	433515-39-0
	433515-40-3	433515-41-4	433515-42-5	433515-43-6	433515-44-7
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human lung)

IT 7440-21-3, Silicon, uses

RL: DEV (Device component use); USES (Uses)

(amorphous or crystalline, spatially addressable substrate; human
genome-derived single exon nucleic acid probes useful for anal. of gene
expression in human lung)

IT 400778-72-5

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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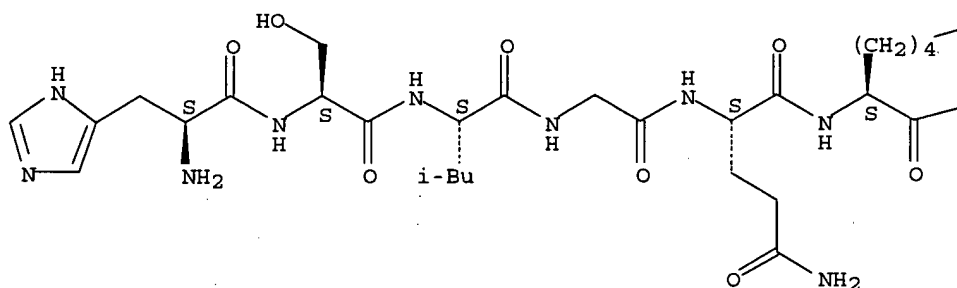
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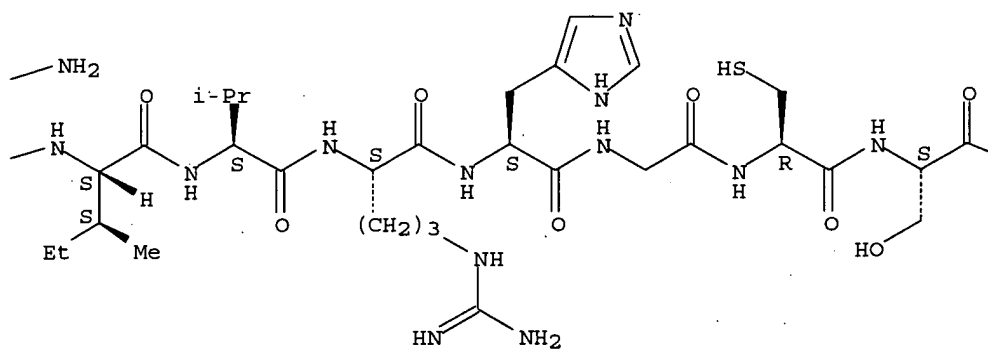
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Absolute stereochemistry.

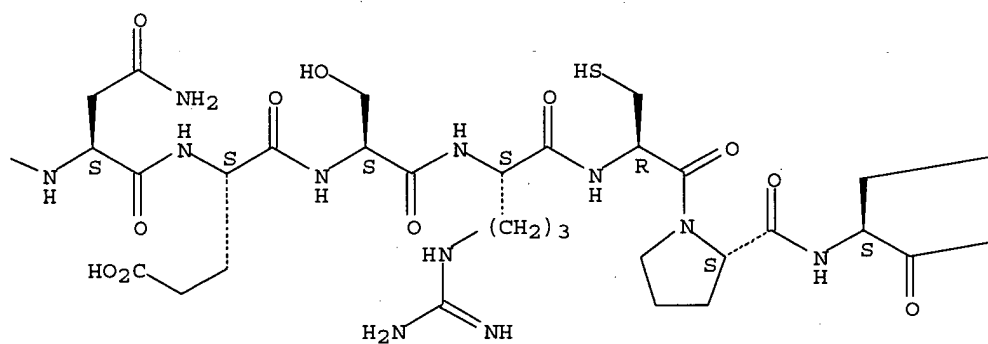
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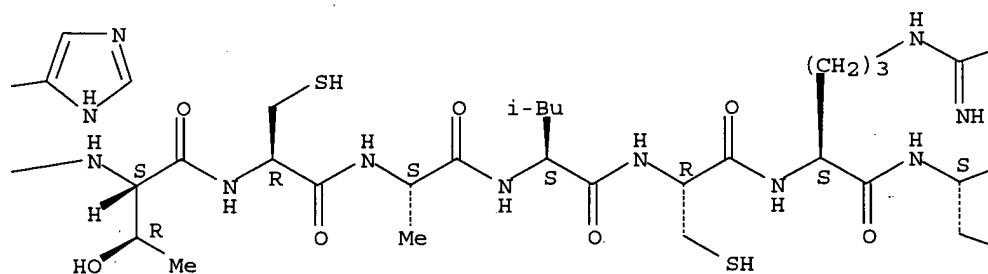
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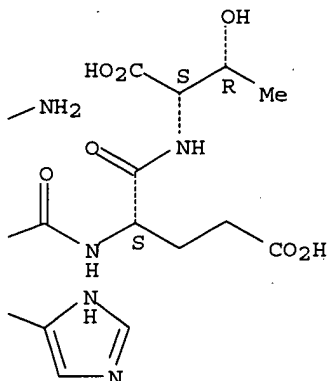
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PAGE 1-D



PAGE 1-E



L24 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:348601 HCAPLUS
 DN 137:28984
 ED Entered STN: 10 May 2002
 TI Human genome derived single exon nucleic acid probes useful for gene
 expression analysis
 IN Penn, Sharron Gaynor; Rank, David Russell; Chen, Wensheng; Hanzel, David
 Kagen
 PA USA
 SO U.S. Pat. Appl. Publ., 97 pp., Cont.-in-part of U.S. Ser. No. 774,203.
 CODEN: USXXCO
 DT Patent
 LA English
 IC C12Q001-68; C07H021-04
 INCL 435006000
 CC 3-1 (Biochemical Genetics)
 Section cross-reference(s): 13
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 US 2001-827998 A3 20010406 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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AB Methods and apparatus for predicting, confirming and displaying functional regions from genomic sequence data are used to identify 16,834 unique human genome-derived single exon probes useful for gene expression anal., particularly gene expression anal. by microarray. Also presented are genome-derived single exon microarrays that include such probes, peptides encoded by the exons, and antibodies thereto. The human genome-derived single-exon probes are known to be expressed in one or more human tissues or cell types, particularly human brain, heart, liver, fetal liver, placenta, lung, bone marrow, BT474 and other human mammary epithelial cells, HeLa and other human cervical epithelial cells, and HBL 100 and other human mammary epithelial cells. The invention provides a method of financing, selling and/or licensing genome-derived single-exon microarrays to customer desiring to measure gene expression, comprising: making available for computerized query or subscription service a database having a record corresponding to each genome-derived single exon microarray available for sale and/or license. [This abstract record is one of ten records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ST genome exon probe gene expression analysis; microarray exon probe gene expression analysis human; sequence gene exon probe human; business genome exon probe gene expression analysis

IT Animal cell line
(BT 474; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Animal cell line
(HBL 100; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Graph theory
(Mondrian representation of sequence and expression data; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Liver
(adult and fetal; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Industry
(bioinformatic; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Uterus
(cervix, epithelium; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT Mammary gland
(epithelium; human genome derived single exon nucleic acid probes
useful for gene expression anal.)

IT Genetic element
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP
(Properties); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(exon; human genome derived single exon nucleic acid probes useful for
gene expression anal.)

IT Computer application
(for storage of sequence and gene expression data; human genome derived
single exon nucleic acid probes useful for gene expression anal.)

IT Bioinformatics
Bone marrow
Brain
DNA microarray technology
DNA sequences
Databases
HeLa cell
Heart
Human
Lung
Molecular cloning
Placenta
Protein sequences
(human genome derived single exon nucleic acid probes useful for gene
expression anal.)

IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
ANST (Analytical study); BIOL (Biological study)
(human genome derived single exon nucleic acid probes useful for gene
expression anal.)

IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study); USES (Uses)
(human genome derived single exon nucleic acid probes useful for gene
expression anal.)

IT Probes (nucleic acid)
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP
(Properties); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(human genome derived single exon nucleic acid probes useful for gene
expression anal.)

IT Nucleic acids
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP
(Properties); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(labeled; human genome derived single exon nucleic acid probes useful
for gene expression anal.)

IT Epithelium
(mammary; human genome derived single exon nucleic acid probes useful
for gene expression anal.)

IT Liver
(toxicity, adult and fetal; human genome derived single exon nucleic
acid probes useful for gene expression anal.)

IT Bone marrow
Heart
Lung
(toxicity; human genome derived single exon nucleic acid probes useful
for gene expression anal.)

IT Epithelium
(uterine cervical; human genome derived single exon nucleic acid probes
useful for gene expression anal.)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

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	400810-86-8	400810-96-0	400810-98-2	400810-99-3	400811-01-0
	400811-03-2	400811-09-8	400811-12-3	400811-14-5	400811-16-7
	400811-17-8	400811-18-9	400811-19-0	400811-20-3	400811-21-4
	400811-22-5	400811-24-7	400811-25-8	400811-26-9	400811-27-0
	400811-28-1	400811-29-2	400811-31-6	400811-32-7	400811-34-9
	400811-35-0	400811-36-1	400811-39-4	400811-40-7	400811-44-1

400811-45-2	400811-46-3	400811-53-2	400811-54-3	400811-57-6
400811-58-7	400811-60-1	400811-61-2	400811-62-3	400811-64-5
400811-65-6	400811-68-9	400811-69-0	400811-71-4	400811-72-5
400811-75-8	400811-77-0	400811-85-0	400811-86-1	400811-87-2
400811-90-7	400811-96-3	400812-01-3	400812-03-5	400812-04-6
400812-05-7	400812-09-1	400812-14-8	400812-15-9	400812-16-0
400812-24-0	400812-26-2	400812-29-5	400812-32-0	400812-33-1
400812-37-5	400812-42-2	400812-43-3	400812-45-5	400812-48-8
400812-57-9	400812-58-0	400812-64-8	400812-66-0	400812-68-2
400812-69-3	400812-70-6	400812-75-1	400812-76-2	400812-77-3
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400813-62-9	400813-71-0	400813-72-1	400813-76-5	400813-84-5
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400814-08-6	400814-09-7	400814-11-1	400814-14-4	400814-15-5
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400814-26-8	400814-29-1	400814-30-4	400814-31-5	400814-32-6
400814-33-7	400814-35-9	400814-36-0	400814-38-2	400814-39-3
400814-41-7	400814-42-8	400814-44-0	400814-48-4	400814-50-8
400814-51-9	400814-52-0	400814-53-1	400814-54-2	400814-57-5
400814-58-6	400814-62-2	400814-63-3	400814-64-4	400814-65-5
400814-68-8	400814-69-9	400814-71-3	400814-73-5	400814-75-7
400814-76-8	400814-77-9	400814-78-0	400814-80-4	400814-82-6
400814-83-7	400814-84-8			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	400814-85-9	400814-86-0	400814-88-2	400814-89-3	400814-90-6
	400814-91-7	400814-96-2	400814-97-3	400814-98-4	400815-00-1
	400815-02-3	400815-07-8	400815-08-9	400815-12-5	400815-13-6
	400815-14-7	400815-15-8	400815-16-9	400815-17-0	400815-19-2
	400815-20-5	400815-21-6	400815-22-7	400815-23-8	400815-27-2
	400815-28-3	400815-29-4	400815-30-7	400815-31-8	400815-35-2
	400815-38-5	400815-39-6	400815-40-9	400815-41-0	400815-42-1
	400815-43-2	400815-44-3	400815-45-4	400815-46-5	400815-47-6
	400815-48-7	400815-51-2	400815-52-3	400815-54-5	400815-55-6
	400815-56-7	400815-57-8	400815-58-9	400815-59-0	400815-60-3
	400815-61-4	400815-62-5	400815-63-6	400815-64-7	400815-70-5
	400815-71-6	400815-75-0	400815-86-3	400815-90-9	400815-91-0
	400815-97-6	400815-99-8	400816-07-1	400816-18-4	400816-20-8
	400816-55-9	400816-82-2	400816-83-3	400816-84-4	400816-91-3
	400816-96-8	400817-01-8	400817-06-3	400817-12-1	400817-14-3
	400817-15-4	400817-16-5	400817-17-6	400817-21-2	400817-24-5
	400817-37-0	400817-38-1	400817-39-2	400817-40-5	400817-42-7
	400817-44-9	400817-48-3	400817-50-7	400817-52-9	400817-53-0
	400817-54-1	400817-56-3	400817-57-4	400817-59-6	400817-61-0
	400817-62-1	400817-65-4	400817-66-5	400817-70-1	400817-79-0
	400817-87-0	400817-91-6	400817-92-7	400817-93-8	400817-96-1
	400818-17-9	400818-25-9	400818-32-8	400818-42-0	400818-44-2
	400818-45-3	400818-47-5	400818-48-6	400818-50-0	400818-61-3
	400818-62-4	400818-63-5	400818-66-8	400818-69-1	400818-71-5
	400818-76-0	400818-80-6	400818-81-7	400818-88-4	400818-89-5
	400818-90-8	400818-98-6	400818-99-7	400819-00-3	400819-01-4
	400819-02-5	400819-03-6	400819-04-7	400819-07-0	400819-09-2
	400819-10-5	400819-12-7	400819-13-8	400819-14-9	400819-15-0
	400819-16-1	400819-18-3	400868-63-5	400869-31-0	401793-12-2
	401793-24-6	401793-48-4	401794-67-0	401794-72-7	401794-76-1
	401796-30-3	401796-66-5	401796-75-6	401796-91-6	401796-97-2

401797-03-3	401797-05-5	401797-22-6	401797-25-9	401797-41-9
401797-42-0	401797-43-1	401797-47-5	401797-48-6	401797-50-0
401797-52-2	401797-53-3	401797-60-2	401797-71-5	401797-77-1
401798-01-4	401798-07-0	401798-39-8	401798-42-3	401798-45-6
401798-50-3	401798-53-6	401798-61-6	401798-63-8	401798-66-1
401798-69-4	401798-76-3	401798-80-9	401798-83-2	401798-87-6
401798-90-1	401798-92-3	401798-94-5	401798-96-7	401798-99-0
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401800-03-1	401800-40-6	401800-52-0	401801-80-7	401802-22-0
401802-30-0	401804-53-3	401805-42-3	401805-47-8	401805-56-9
401805-88-7	401805-93-4	401805-95-6	401806-13-1	401806-35-7
401806-90-4	401806-92-6	401807-03-2	401807-31-6	401807-85-0
401808-01-3	401808-31-9	401808-41-1	401808-45-5	401808-53-5
401808-89-7	401808-91-1	401808-93-3	401809-05-0	401809-07-2
401809-09-4	401809-57-2	401809-58-3	401809-59-4	401809-60-7
401809-61-8	401809-62-9	401809-65-2	401809-66-3	401809-70-9
401809-71-0	401893-48-9			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	401893-49-0	401893-51-4	401893-52-5	401893-53-6	401893-54-7
	401893-55-8	401893-56-9	401893-57-0	401893-59-2	401893-60-5
	401893-61-6	401893-62-7	401893-63-8	401893-65-0	401893-66-1
	401893-67-2	401893-68-3	401893-70-7	401893-71-8	401893-72-9
	401893-73-0	401893-74-1	401893-75-2	401893-76-3	401893-77-4
	401893-78-5	401893-79-6	401893-85-4	401893-87-6	401893-88-7
	401893-90-1	401893-91-2	401893-92-3	401893-97-8	401894-01-7
	401894-03-9	401894-05-1	401894-06-2	401894-10-8	401894-11-9
	401894-12-0	401894-14-2	401894-35-7	401894-36-8	401894-45-9
	401894-47-1	401894-48-2	401894-49-3	401894-51-7	401894-53-9
	401894-54-0	401894-55-1	401894-56-2	402469-67-4	402469-69-6
	402469-72-1	402469-73-2	402469-91-4	402469-99-2	402470-00-2
	402470-01-3	402734-33-2	402734-48-9	402734-53-6	402734-88-7
	402734-89-8	402734-93-4	402734-98-9	402735-00-6	402735-05-1
	402735-07-3	402735-10-8	402735-12-0	402735-14-2	402735-16-4
	402735-18-6	402735-50-6	402735-52-8	402735-54-0	402735-55-1
	402735-58-4	402735-59-5	402735-60-8	402735-61-9	402735-62-0
	402735-63-1	402735-64-2	402735-65-3	402735-67-5	402735-68-6
	402735-70-0	402735-71-1	402735-72-2	402735-73-3	402735-75-5
	402735-76-6	402735-77-7	402735-78-8	402735-79-9	402735-80-2
	402735-81-3	402735-83-5	402735-84-6	402735-85-7	402735-86-8
	402735-87-9	402735-88-0	402735-89-1	402735-90-4	402735-91-5
	402735-92-6	402735-93-7	402735-94-8	402735-95-9	402735-96-0
	402735-97-1	402735-98-2	402735-99-3	402736-00-9	402736-01-0
	405151-06-6	405151-07-7	405151-08-8	405151-09-9	405151-11-3
	405151-12-4	405151-13-5	405151-14-6	405151-15-7	405151-16-8
	405151-17-9	405151-18-0	405151-19-1	405151-20-4	405151-24-8
	405151-25-9	405152-82-1	405153-32-4	405153-42-6	405154-16-7
	413597-79-2	413597-80-5	413597-81-6	413597-82-7	413598-09-1
	413598-10-4	413598-11-5	413598-12-6	413598-13-7	413598-14-8
	413598-33-1	413598-34-2	413598-35-3	413598-36-4	413598-40-0
	413598-42-2	413598-43-3	413598-44-4	413598-45-5	413598-46-6
	413598-47-7	413598-48-8	413598-62-6	413598-76-2	413598-77-3
	413598-78-4	413598-79-5	413598-80-8	413598-82-0	413598-83-1
	413598-84-2	413598-86-4	413598-87-5	413598-88-6	413598-89-7
	413598-90-0	413598-91-1	413598-92-2	413598-93-3	413598-94-4
	413598-95-5	413598-96-6	419564-08-2	419564-10-6	419564-11-7
	419564-18-4	419564-19-5	419564-20-8	419564-28-6	419564-39-9
	421548-47-2	421548-48-3	421548-49-4	421548-50-7	421548-52-9
	421548-53-0	421548-54-1	421548-55-2	421548-56-3	421548-57-4
	421548-58-5	421548-59-6	421548-60-9	421548-61-0	421548-62-1
	421548-63-2	421548-74-5	421548-87-0	421548-89-2	421548-94-9
	421548-99-4	421549-00-0	421549-01-1	421549-02-2	421549-03-3
	421549-04-4	421549-05-5	421549-06-6	421549-07-7	421549-08-8
	421549-09-9	421549-10-2	421549-11-3	421549-12-4	421549-13-5

421549-14-6 421549-15-7 421549-16-8 421549-19-1 421549-22-6
 421549-23-7 421549-24-8 421549-25-9 421549-26-0 421549-27-1
 421549-28-2 421549-29-3

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
 probes useful for gene expression anal.)

IT	421549-30-6	421549-31-7	421549-32-8	421549-33-9	421549-48-6
	421549-49-7	421549-50-0	421549-58-8	421549-59-9	421550-03-0
	421550-04-1	421550-05-2	421550-10-9	421550-27-8	421550-38-1
	421550-91-6	421550-97-2	421550-98-3	421550-99-4	421551-00-0
	421551-01-1	421551-06-6	421551-07-7	421551-08-8	421551-09-9
	421551-10-2	421551-11-3	421551-12-4	421551-13-5	421551-14-6
	421551-15-7	421551-30-6	421551-32-8	421551-36-2	421551-37-3
	433923-94-5	433923-95-6	433923-96-7	433923-97-8	433923-98-9
	433924-05-1	433930-19-9	433930-65-5	433930-69-9	433930-70-2
	433930-71-3	433930-72-4	433930-98-4	433930-99-5	433931-00-1
	433931-01-2	433931-02-3	433931-03-4	433931-04-5	433931-05-6
	433931-06-7	433931-07-8	433931-08-9	433931-09-0	433931-10-3
	433931-11-4	433931-12-5	433931-13-6	433931-14-7	433931-15-8
	433931-16-9	433931-17-0	433931-75-0	433931-82-9	433931-84-1
	433931-85-2	433931-86-3	433931-87-4	433931-88-5	433931-89-6
	433931-90-9	433931-91-0	433931-92-1	433931-93-2	433931-94-3
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	433932-00-4	433932-01-5	433932-02-6	433932-03-7	433932-04-8
	433932-05-9	433932-06-0	433932-07-1	433932-08-2	433932-09-3
	433932-10-6	433932-11-7	433932-12-8	433932-13-9	433932-14-0
	433932-15-1	433932-16-2	433932-17-3	433932-18-4	433932-19-5
	433932-20-8	437051-62-2	437051-63-3	437051-64-4	437051-65-5
	437051-66-6	437051-67-7	437051-68-8	437051-69-9	437051-70-2
	437051-71-3	437051-72-4	437051-73-5	437051-74-6	437051-75-7
	437051-76-8	437051-77-9	437051-78-0	437051-79-1	437051-80-4
	437051-81-5	437051-82-6	437051-83-7	437051-84-8	437051-85-9
	437051-86-0	437051-87-1	437051-88-2	437051-89-3	437051-90-6
	437051-91-7	437051-92-8	437051-93-9	437051-94-0	437051-95-1
	437051-96-2	437051-97-3	437051-98-4	437051-99-5	437052-00-1
	437052-01-2	437052-02-3	437052-03-4	437052-04-5	437052-05-6
	437052-06-7	437052-07-8	437052-08-9	437052-09-0	437052-10-3
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	437052-16-9	437052-17-0	437052-18-1	437052-19-2	437052-20-5
	437052-21-6	437052-22-7	437052-23-8	437052-24-9	437052-25-0
	437052-26-1	437052-27-2	437052-28-3	437052-29-4	437052-30-7
	437052-31-8	437052-32-9	437052-33-0	437052-34-1	437052-35-2
	437052-36-3	437052-37-4	437052-38-5	437052-39-6	437052-40-9
	437052-41-0	437052-42-1	437052-43-2	437052-44-3	437052-45-4
	437052-46-5	437052-47-6	437052-48-7	437052-49-8	437052-50-1
	437052-51-2	437052-52-3	437052-53-4	437052-54-5	437052-55-6
	437052-56-7	437052-57-8	437052-58-9	437052-59-0	437052-60-3
	437052-61-4	437052-62-5	437052-63-6	437052-64-7	437052-65-8
	437052-66-9	437052-67-0	437052-68-1	437052-69-2	437052-70-5
	437052-71-6	437052-72-7	437052-73-8	437052-74-9	437052-75-0
	437052-76-1	437052-77-2	437052-78-3	437052-79-4	437052-80-7
	437052-81-8	437052-82-9	437052-83-0	437052-84-1	437052-85-2
	437052-86-3	437052-87-4	437052-88-5	437052-89-6	437052-90-9
	437052-91-0	437052-92-1			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
 probes useful for gene expression anal.)

IT	437052-93-2	437052-94-3	437052-95-4	437052-96-5	437052-97-6
	437052-98-7	437052-99-8	437053-00-4	437053-01-5	437053-02-6
	437053-03-7	437053-04-8	437053-05-9	437053-06-0	437053-07-1
	437053-08-2	437053-09-3	437053-10-6	437053-11-7	437053-12-8
	437053-13-9	437053-14-0	437053-15-1	437053-16-2	437053-17-3
	437053-18-4	437053-19-5	437053-20-8	437053-21-9	437053-22-0
	437053-23-1	437053-24-2	437053-25-3	437053-26-4	437053-27-5

437053-28-6	437053-29-7	437053-30-0	437053-31-1	437053-32-2
437053-33-3	437053-34-4	437053-35-5	437053-36-6	437053-37-7
437053-38-8	437053-39-9	437053-40-2	437053-41-3	437053-42-4
437053-43-5	437053-44-6	437053-45-7	437053-46-8	437053-47-9
437053-48-0	437053-49-1	437053-50-4	437053-51-5	437053-52-6
437053-53-7	437053-54-8	437053-55-9	437053-56-0	437053-57-1
437053-58-2	437053-59-3	437053-60-6	437053-61-7	437053-62-8
437053-63-9	437053-64-0	437053-65-1	437053-66-2	437053-67-3
437053-68-4	437053-69-5	437053-70-8	437053-71-9	437053-72-0
437053-73-1	437053-74-2	437053-75-3	437053-76-4	437053-77-5
437053-78-6	437053-79-7	437053-80-0	437053-81-1	437053-82-2
437053-83-3	437053-84-4	437053-85-5	437053-86-6	437053-87-7
437053-88-8	437053-89-9	437053-90-2	437053-91-3	437053-92-4
437053-93-5	437053-94-6	437053-95-7	437053-96-8	437053-97-9
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437054-23-4	437054-24-5	437054-25-6	437054-26-7	437054-27-8
437054-28-9	437054-29-0	437054-30-3	437054-31-4	437054-32-5
437054-33-6	437054-34-7	437054-35-8	437054-36-9	437054-37-0
437054-38-1	437054-39-2	437054-40-5	437054-41-6	437054-42-7
437054-43-8	437054-44-9	437054-45-0	437054-46-1	437054-47-2
437054-48-3	437054-49-4	437054-50-7	437054-51-8	437054-52-9
437054-53-0	437054-54-1	437054-55-2	437054-56-3	437054-57-4
437054-58-5	437054-59-6	437054-60-9	437054-61-0	437054-62-1
437054-63-2	437054-64-3	437054-65-4	437054-66-5	437054-67-6
437054-68-7	437054-69-8	437054-70-1	437054-71-2	437054-72-3
437054-73-4	437054-74-5	437054-75-6	437054-76-7	437054-77-8
437054-78-9	437054-79-0	437054-80-3	437054-81-4	437054-82-5
437054-83-6	437054-84-7	437054-85-8	437054-86-9	437054-87-0
437054-88-1	437054-89-2	437054-90-5	437054-91-6	437054-92-7
437054-93-8	437054-94-9	437054-95-0	437054-96-1	437054-97-2
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437055-03-3	437055-04-4	437055-05-5	437055-06-6	437055-07-7
437055-08-8	437055-09-9	437055-10-2	437055-11-3	437055-12-4
437055-13-5	437055-14-6	437055-15-7	437055-16-8	437055-17-9
437055-18-0	437055-19-1	437055-20-4	437055-21-5	437055-22-6
437055-23-7	437055-24-8	437055-25-9	437055-26-0	437055-27-1
437055-28-2	437055-29-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437055-30-6	437055-31-7	437055-32-8	437055-33-9	437055-34-0
	437055-35-1	437055-36-2	437055-37-3	437055-38-4	437055-39-5
	437055-40-8	437055-41-9	437055-42-0	437055-43-1	437055-44-2
	437055-45-3	437055-46-4	437055-47-5	437055-48-6	437055-49-7
	437055-50-0	437055-51-1	437055-52-2	437055-53-3	437055-54-4
	437055-55-5	437055-56-6	437055-57-7	437055-58-8	437055-59-9
	437055-60-2	437055-61-3	437055-62-4	437055-63-5	437055-64-6
	437055-65-7	437055-66-8	437055-67-9	437055-68-0	437055-69-1
	437055-70-4	437055-71-5	437055-72-6	437055-73-7	437055-74-8
	437055-75-9	437055-76-0	437055-77-1	437055-78-2	437055-79-3
	437055-80-6	437055-81-7	437055-82-8	437055-83-9	437055-84-0
	437055-85-1	437055-86-2	437055-87-3	437055-88-4	437055-89-5
	437055-90-8	437055-91-9	437055-92-0	437055-93-1	437055-94-2
	437055-95-3	437055-96-4	437055-97-5	437055-98-6	437055-99-7
	437056-00-3	437056-01-4	437056-02-5	437056-03-6	437056-04-7
	437056-05-8	437056-06-9	437056-07-0	437056-08-1	437056-09-2
	437056-10-5	437056-11-6	437056-12-7	437056-13-8	437056-14-9
	437056-15-0	437056-16-1	437056-17-2	437056-18-3	437056-19-4
	437056-20-7	437056-21-8	437056-22-9	437056-23-0	437056-24-1
	437056-25-2	437056-26-3	437056-27-4	437056-28-5	437056-29-6
	437056-30-9	437056-31-0	437056-32-1	437056-33-2	437056-34-3

437056-35-4	437056-36-5	437056-37-6	437056-38-7	437056-39-8
437056-40-1	437056-41-2	437056-42-3	437056-43-4	437056-44-5
437056-45-6	437056-46-7	437056-47-8	437056-48-9	437056-49-0
437056-50-3	437056-51-4	437056-52-5	437056-53-6	437056-54-7
437056-55-8	437056-56-9	437056-57-0	437056-58-1	437056-59-2
437056-60-5	437056-61-6	437056-62-7	437056-63-8	437056-64-9
437056-65-0	437056-66-1	437056-67-2	437056-68-3	437056-69-4
437056-70-7	437056-71-8	437056-72-9	437056-73-0	437056-74-1
437056-75-2	437056-76-3	437056-77-4	437056-78-5	437056-79-6
437056-80-9	437056-81-0	437056-82-1	437056-83-2	437056-84-3
437056-85-4	437056-86-5	437056-87-6	437056-88-7	437056-89-8
437056-90-1	437056-91-2	437056-92-3	437056-93-4	437056-94-5
437056-95-6	437056-96-7	437056-97-8	437056-98-9	437056-99-0
437057-00-6	437057-01-7	437057-02-8	437057-03-9	437057-04-0
437057-05-1	437057-06-2	437057-07-3	437057-08-4	437057-09-5
437057-10-8	437057-11-9	437057-12-0	437057-13-1	437057-14-2
437057-15-3	437057-16-4	437057-17-5	437057-18-6	437057-19-7
437057-20-0	437057-21-1	437057-22-2	437057-23-3	437057-24-4
437057-25-5	437057-26-6	437057-27-7	437057-28-8	437057-29-9
437057-30-2	437057-31-3	437057-32-4	437057-33-5	437057-34-6
437057-35-7	437057-36-8	437057-37-9	437057-38-0	437057-39-1
437057-40-4	437057-41-5	437057-42-6	437057-43-7	437057-44-8
437057-45-9	437057-46-0	437057-47-1	437057-48-2	437057-49-3
437057-50-6	437057-51-7	437057-52-8	437057-53-9	437057-54-0
437057-55-1	437057-56-2	437057-57-3	437057-58-4	437057-59-5
437057-60-8	437057-61-9	437057-62-0	437057-63-1	437057-64-2
437057-65-3	437057-66-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437057-67-5	437057-68-6	437057-69-7	437057-70-0	437057-71-1
	437057-72-2	437057-73-3	437057-74-4	437057-75-5	437057-76-6
	437057-77-7	437057-78-8	437057-79-9	437057-80-2	437057-81-3
	437057-82-4	437057-83-5	437057-84-6	437057-85-7	437057-86-8
	437057-87-9	437057-88-0	437057-89-1	437057-90-4	437057-91-5
	437057-92-6	437057-93-7	437057-94-8	437057-95-9	437057-96-0
	437057-97-1	437057-98-2	437057-99-3	437058-00-9	437058-01-0
	437058-02-1	437058-03-2	437058-04-3	437058-05-4	437058-06-5
	437058-07-6	437058-08-7	437058-09-8	437058-10-1	437058-11-2
	437058-12-3	437058-13-4	437058-14-5	437058-15-6	437058-16-7
	437058-17-8	437058-18-9	437058-19-0	437058-20-3	437058-21-4
	437058-22-5	437058-23-6	437058-24-7	437058-25-8	437058-26-9
	437058-27-0	437058-28-1	437058-29-2	437058-30-5	437058-31-6
	437058-32-7	437058-33-8	437058-34-9	437058-35-0	437058-36-1
	437058-37-2	437058-38-3	437058-39-4	437058-40-7	437058-41-8
	437058-42-9	437058-43-0	437058-44-1	437058-45-2	437058-46-3
	437058-47-4	437058-48-5	437058-49-6	437058-50-9	437058-51-0
	437058-52-1	437058-53-2	437058-54-3	437058-55-4	437058-56-5
	437058-57-6	437058-58-7	437058-59-8	437058-60-1	437058-61-2
	437058-62-3	437058-63-4	437058-64-5	437058-65-6	437058-66-7
	437058-67-8	437058-68-9	437058-69-0	437058-70-3	437058-71-4
	437058-72-5	437058-73-6	437058-74-7	437058-75-8	437058-76-9
	437058-77-0	437058-78-1	437058-79-2	437058-80-5	437058-81-6
	437058-82-7	437058-83-8	437058-84-9	437058-85-0	437058-86-1
	437058-87-2	437058-88-3	437058-89-4	437058-90-7	437058-91-8
	437058-92-9	437058-93-0	437058-94-1	437058-95-2	437058-96-3
	437058-97-4	437058-98-5	437058-99-6	437059-00-2	437059-01-3
	437059-02-4	437059-03-5	437059-04-6	437059-05-7	437059-06-8
	437059-07-9	437059-08-0	437059-09-1	437059-10-4	437059-11-5
	437059-12-6	437059-13-7	437059-14-8	437059-15-9	437059-16-0
	437059-17-1	437059-18-2	437059-19-3	437059-20-6	437059-21-7
	437059-22-8	437059-23-9	437059-24-0	437059-25-1	437059-26-2
	437059-27-3	437059-28-4	437059-29-5	437059-30-8	437059-31-9
	437059-32-0	437059-33-1	437059-34-2	437059-35-3	437059-36-4
	437059-37-5	437059-38-6	437059-39-7	437059-40-0	437059-41-1

437059-42-2	437059-43-3	437059-44-4	437059-45-5	437059-46-6
437059-47-7	437059-48-8	437059-49-9	437059-50-2	437059-51-3
437059-52-4	437059-53-5	437059-54-6	437059-55-7	437059-56-8
437059-57-9	437059-58-0	437059-59-1	437059-60-4	437059-61-5
437059-62-6	437059-63-7	437059-64-8	437059-65-9	437059-66-0
437059-67-1	437059-68-2	437059-69-3	437059-70-6	437059-71-7
437059-72-8	437059-73-9	437059-74-0	437059-75-1	437059-76-2
437059-77-3	437059-78-4	437059-79-5	437059-80-8	437059-81-9
437059-82-0	437059-83-1	437059-84-2	437059-85-3	437059-86-4
437059-87-5	437059-88-6	437059-89-7	437059-90-0	437059-91-1
437059-92-2	437059-93-3	437059-94-4	437059-95-5	437059-96-6
437059-97-7	437059-98-8	437059-99-9	437060-00-9	437060-01-0
437060-02-1	437060-03-2			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437060-04-3	437060-05-4	437060-06-5	437060-07-6	437060-08-7
	437060-09-8	437060-10-1	437060-11-2	437060-12-3	437060-13-4
	437060-14-5	437060-15-6	437060-16-7	437060-17-8	437060-18-9
	437060-19-0	437060-20-3	437060-21-4	437060-22-5	437060-23-6
	437060-24-7	437060-25-8	437060-26-9	437060-27-0	437060-28-1
	437060-29-2	437060-30-5	437060-31-6	437060-32-7	437060-33-8
	437060-34-9	437060-35-0	437060-36-1	437060-37-2	437060-38-3
	437060-39-4	437060-40-7	437060-41-8	437060-42-9	437060-43-0
	437060-44-1	437060-45-2	437060-46-3	437060-47-4	437060-48-5
	437060-49-6	437060-50-9	437060-51-0	437060-52-1	437060-53-2
	437060-54-3	437060-55-4	437060-56-5	437060-57-6	437060-58-7
	437060-59-8	437060-60-1	437060-61-2	437060-62-3	437060-63-4
	437060-64-5	437060-65-6	437060-66-7	437060-67-8	437060-68-9
	437060-69-0	437060-70-3	437060-71-4	437060-72-5	437060-73-6
	437060-74-7	437060-75-8	437060-76-9	437060-77-0	437060-78-1
	437060-79-2	437060-80-5	437060-81-6	437060-82-7	437060-83-8
	437060-84-9	437060-85-0	437060-86-1	437060-87-2	437060-88-3
	437060-89-4	437060-90-7	437060-91-8	437060-92-9	437060-93-0
	437060-94-1	437060-95-2	437060-96-3	437060-97-4	437060-98-5
	437060-99-6	437061-00-2	437061-01-3	437061-02-4	437061-03-5
	437061-04-6	437061-05-7	437061-06-8	437061-07-9	437061-08-0
	437061-09-1	437061-10-4	437061-11-5	437061-12-6	437061-13-7
	437061-14-8	437061-15-9	437061-16-0	437061-17-1	437061-18-2
	437061-19-3	437061-20-6	437061-21-7	437061-22-8	437061-23-9
	437061-24-0	437061-25-1	437061-26-2	437061-27-3	437061-28-4
	437061-29-5	437061-30-8	437061-31-9	437061-32-0	437061-33-1
	437061-34-2	437061-35-3	437061-36-4	437061-37-5	437061-38-6
	437061-39-7	437061-40-0	437061-41-1	437061-42-2	437061-43-3
	437061-44-4	437061-45-5	437061-46-6	437061-47-7	437061-48-8
	437061-49-9	437061-50-2	437061-51-3	437061-52-4	437061-53-5
	437061-54-6	437061-55-7	437061-56-8	437061-57-9	437061-58-0
	437061-59-1	437061-60-4	437061-61-5	437061-62-6	437061-63-7
	437061-64-8	437061-65-9	437061-66-0	437061-67-1	437061-68-2
	437061-69-3	437061-70-6	437061-71-7	437061-72-8	437061-73-9
	437061-74-0	437061-75-1	437061-76-2	437061-77-3	437061-78-4
	437061-79-5	437061-80-8	437061-81-9	437061-82-0	437061-83-1
	437061-84-2	437061-85-3	437061-86-4	437061-87-5	437061-88-6
	437061-89-7	437061-90-0	437061-91-1	437061-92-2	437061-93-3
	437061-94-4	437061-95-5	437061-96-6	437061-97-7	437061-98-8
	437061-99-9	437062-00-5	437062-01-6	437062-02-7	437062-03-8
	437062-04-9	437062-05-0	437062-06-1	437062-07-2	437062-08-3
	437062-09-4	437062-10-7	437062-11-8	437062-12-9	437062-13-0
	437062-14-1	437062-15-2	437062-16-3	437062-17-4	437062-18-5
	437062-19-6	437062-20-9	437062-21-0	437062-22-1	437062-23-2
	437062-24-3	437062-25-4	437062-26-5	437062-27-6	437062-28-7
	437062-29-8	437062-30-1	437062-31-2	437062-32-3	437062-33-4
	437062-34-5	437062-35-6	437062-36-7	437062-37-8	437062-38-9
	437062-39-0	437062-40-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT	437062-41-4	437062-42-5	437062-43-6	437062-44-7	437062-45-8
	437062-46-9	437062-47-0	437062-48-1	437062-49-2	437062-50-5
	437062-51-6	437062-52-7	437062-53-8	437062-54-9	437062-55-0
	437062-56-1	437062-57-2	437062-58-3	437062-59-4	437062-60-7
	437062-61-8	437062-62-9	437062-63-0	437062-64-1	437062-65-2
	437062-66-3	437062-67-4	437062-68-5	437062-69-6	437062-70-9
	437062-71-0	437062-72-1	437062-73-2	437062-74-3	437062-75-4
	437062-76-5	437062-77-6	437062-78-7	437062-79-8	437062-80-1
	437062-81-2	437062-82-3	437062-83-4	437062-84-5	437062-85-6
	437062-86-7	437062-87-8	437062-88-9	437062-89-0	437062-90-3
	437062-91-4	437062-92-5	437062-93-6	437062-94-7	437062-95-8
	437062-96-9	437062-97-0	437062-98-1	437062-99-2	437063-00-8
	437063-01-9	437063-02-0	437063-03-1	437063-04-2	437063-05-3
	437063-06-4	437063-07-5	437063-08-6	437063-09-7	437063-10-0
	437063-11-1	437063-12-2	437063-13-3	437063-14-4	437063-15-5
	437063-16-6	437063-17-7	437063-18-8	437063-19-9	437063-20-2
	437063-21-3	437063-22-4	437063-23-5	437063-24-6	437063-25-7
	437063-26-8	437063-27-9	437063-28-0	437063-29-1	437063-30-4
	437063-31-5	437063-32-6	437063-33-7	437063-34-8	437063-35-9
	437063-36-0	437063-37-1	437063-38-2	437063-39-3	437063-40-6
	437063-41-7	437063-42-8	437063-43-9	437063-44-0	437063-45-1
	437063-46-2	437063-47-3	437063-48-4	437063-49-5	437063-50-8
	437063-51-9	437063-52-0	437063-53-1	437063-54-2	437063-55-3
	437063-56-4	437063-57-5	437063-58-6	437063-59-7	437063-60-0
	437063-61-1	437063-62-2	437063-63-3	437063-64-4	437063-65-5
	437063-66-6	437063-67-7	437063-68-8	437063-69-9	437063-70-2
	437063-71-3	437063-72-4	437063-73-5	437063-74-6	437063-75-7
	437063-76-8	437063-77-9	437063-78-0	437063-79-1	437063-80-4
	437063-81-5	437063-82-6	437063-83-7	437063-84-8	437063-85-9
	437063-86-0	437063-87-1	437063-88-2	437063-89-3	437063-90-6
	437063-91-7	437063-92-8	437063-93-9	437063-94-0	437063-95-1
	437063-96-2	437063-97-3	437063-98-4	437063-99-5	437064-00-1
	437064-01-2	437064-02-3	437064-03-4	437064-04-5	437064-05-6
	437064-06-7	437064-07-8	437064-08-9	437064-09-0	437064-10-3
	437064-11-4	437064-12-5	437064-13-6	437064-14-7	437064-15-8
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	437064-21-6	437064-22-7	437064-23-8	437064-24-9	437064-25-0
	437064-26-1	437064-27-2	437064-28-3	437064-29-4	437064-30-7
	437064-31-8	437064-32-9	437064-33-0	437064-34-1	437064-35-2
	437064-36-3	437064-37-4	437064-38-5	437064-39-6	437064-40-9
	437064-41-0	437064-42-1	437064-43-2	437064-44-3	437064-45-4
	437064-46-5	437064-47-6	437064-48-7	437064-49-8	437064-50-1
	437064-51-2	437064-52-3	437064-53-4	437064-54-5	437064-55-6
	437064-56-7	437064-57-8	437064-58-9	437064-59-0	437064-60-3
	437064-61-4	437064-62-5	437064-63-6	437064-64-7	437064-65-8
	437064-66-9	437064-67-0	437064-68-1	437064-69-2	437064-70-5
	437064-71-6	437064-72-7	437064-73-8	437064-74-9	437064-75-0
	437064-76-1	437064-77-2			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid probes useful for gene expression anal.)

IT	437064-78-3	437064-79-4	437064-80-7	437064-81-8	437064-82-9
	437064-83-0	437064-84-1	437064-85-2	437064-86-3	437064-87-4
	437064-88-5	437064-89-6	437064-90-9	437064-91-0	437064-92-1
	437064-93-2	437064-94-3	437064-95-4	437064-96-5	437064-97-6
	437064-98-7	437064-99-8	437065-00-4	437065-01-5	437065-02-6
	437065-03-7	437065-04-8	437065-05-9	437065-06-0	437065-07-1
	437065-08-2	437065-09-3	437065-10-6	437065-11-7	437065-12-8
	437065-13-9	437065-14-0	437065-15-1	437065-16-2	437065-17-3
	437065-18-4	437065-19-5	437065-20-8	437065-21-9	437065-22-0
	437065-23-1	437065-24-2	437065-25-3	437065-26-4	437065-27-5
	437065-28-6	437065-29-7	437065-30-0	437065-31-1	437065-32-2

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437065-53-7	437065-54-8	437065-55-9	437065-56-0	437065-57-1
437065-58-2	437065-59-3	437065-60-6	437065-61-7	437065-62-8
437065-63-9	437065-64-0	437065-65-1	437065-66-2	437065-67-3
437065-68-4	437065-69-5	437065-70-8	437065-71-9	437065-72-0
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437065-83-3	437065-84-4	437065-85-5	437065-86-6	437065-87-7
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437066-13-2	437066-14-3	437066-15-4	437066-16-5	437066-17-6
437066-18-7	437066-19-8	437066-20-1	437066-21-2	437066-22-3
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437066-33-6	437066-34-7	437066-35-8	437066-36-9	437066-37-0
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437066-43-8	437066-44-9	437066-45-0	437066-46-1	437066-47-2
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437066-58-5	437066-59-6	437066-60-9	437066-61-0	437066-62-1
437066-63-2	437066-64-3	437066-65-4	437066-66-5	437066-67-6
437066-68-7	437066-69-8	437066-70-1	437066-71-2	437066-72-3
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437066-83-6	437066-84-7	437066-85-8	437066-86-9	437066-87-0
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437066-93-8	437066-94-9	437066-95-0	437066-96-1	437066-97-2
437066-98-3	437066-99-4	437067-00-0	437067-01-1	437067-02-2
437067-03-3	437067-04-4	437067-05-5	437067-06-6	437067-07-7
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437067-13-5	437067-14-6			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437067-15-7	437067-16-8	437067-17-9	437067-18-0	437067-19-1
	437067-20-4	437067-21-5	437067-22-6	437067-23-7	437067-24-8
	437067-25-9	437067-26-0	437067-27-1	437067-28-2	437067-29-3
	437067-30-6	437067-31-7	437067-32-8	437067-33-9	437067-34-0
	437067-35-1	437067-36-2	437067-37-3	437067-38-4	437067-39-5
	437067-40-8	437067-41-9	437067-42-0	437067-43-1	437067-44-2
	437067-45-3	437067-46-4	437067-47-5	437067-48-6	437067-49-7
	437067-50-0	437067-51-1	437067-52-2	437067-53-3	437067-54-4
	437067-55-5	437067-56-6	437067-57-7	437067-58-8	437067-59-9
	437067-60-2	437067-61-3	437067-62-4	437067-63-5	437067-64-6
	437067-65-7	437067-66-8	437067-67-9	437067-68-0	437067-69-1
	437067-70-4	437067-71-5	437067-72-6	437067-73-7	437067-74-8
	437067-75-9	437067-76-0	437067-77-1	437067-78-2	437067-79-3
	437067-80-6	437067-81-7	437067-82-8	437067-83-9	437067-84-0
	437067-85-1	437067-86-2	437067-87-3	437067-88-4	437067-89-5
	437067-90-8	437067-91-9	437067-92-0	437067-93-1	437067-94-2
	437067-95-3	437067-96-4	437067-97-5	437067-98-6	437067-99-7
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	437068-05-8	437068-06-9	437068-07-0	437068-08-1	437068-09-2
	437068-10-5	437068-11-6	437068-12-7	437068-13-8	437068-14-9
	437068-15-0	437068-16-1	437068-17-2	437068-18-3	437068-19-4
	437068-20-7	437068-21-8	437068-22-9	437068-23-0	437068-24-1
	437068-25-2	437068-26-3	437068-27-4	437068-28-5	437068-29-6
	437068-30-9	437068-31-0	437068-32-1	437068-33-2	437068-34-3
	437068-35-4	437068-36-5	437068-37-6	437068-38-7	437068-39-8

437068-40-1	437068-41-2	437068-42-3	437068-43-4	437068-44-5
437068-45-6	437068-46-7	437068-47-8	437068-48-9	437068-49-0
437068-50-3	437068-51-4	437068-52-5	437068-53-6	437068-54-7
437068-55-8	437068-56-9	437068-57-0	437068-58-1	437068-59-2
437068-60-5	437068-61-6	437068-62-7	437068-63-8	437068-64-9
437068-65-0	437068-66-1	437068-67-2	437068-68-3	437068-69-4
437068-70-7	437068-71-8	437068-72-9	437068-73-0	437068-74-1
437068-75-2	437068-76-3	437068-77-4	437068-78-5	437068-79-6
437068-80-9	437068-81-0	437068-82-1	437068-83-2	437068-84-3
437068-85-4	437068-86-5	437068-87-6	437068-88-7	437068-89-8
437068-90-1	437068-91-2	437068-92-3	437068-93-4	437068-94-5
437068-95-6	437068-96-7	437068-97-8	437068-98-9	437068-99-0
437069-00-6	437069-01-7	437069-02-8	437069-03-9	437069-04-0
437069-05-1	437069-06-2	437069-07-3	437069-08-4	437069-09-5
437069-10-8	437069-11-9	437069-12-0	437069-13-1	437069-14-2
437069-15-3	437069-16-4	437069-17-5	437069-18-6	437069-19-7
437069-20-0	437069-21-1	437069-22-2	437069-23-3	437069-24-4
437069-25-5	437069-26-6	437069-27-7	437069-28-8	437069-29-9
437069-30-2	437069-31-3	437069-32-4	437069-33-5	437069-34-6
437069-35-7	437069-36-8	437069-37-9	437069-38-0	437069-39-1
437069-40-4	437069-41-5	437069-42-6	437069-43-7	437069-44-8
437069-45-9	437069-46-0	437069-47-1	437069-48-2	437069-49-3
437069-50-6	437069-51-7			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437069-52-8	437069-53-9	437069-54-0	437069-55-1	437069-56-2
	437069-57-3	437069-58-4	437069-59-5	437069-60-8	437069-61-9
	437069-62-0	437069-63-1	437069-64-2	437069-65-3	437069-66-4
	437069-67-5	437069-68-6	437069-69-7	437069-70-0	437069-71-1
	437069-72-2	437069-73-3	437069-74-4	437069-75-5	437069-76-6
	437069-77-7	437069-78-8	437069-79-9	437069-80-2	437069-81-3
	437069-82-4	437069-83-5	437069-84-6	437069-85-7	437069-86-8
	437069-87-9	437069-88-0	437069-89-1	437069-90-4	437069-91-5
	437069-92-6	437069-93-7	437069-94-8	437069-95-9	437069-96-0
	437069-97-1	437069-98-2	437069-99-3	437070-00-3	437070-01-4
	437070-02-5	437070-03-6	437070-04-7	437070-05-8	437070-06-9
	437070-07-0	437070-08-1	437070-09-2	437070-10-5	437070-11-6
	437070-12-7	437070-13-8	437070-14-9	437070-15-0	437070-16-1
	437070-17-2	437070-18-3	437070-19-4	437070-20-7	437070-21-8
	437070-22-9	437070-23-0	437070-24-1	437070-25-2	437070-26-3
	437070-27-4	437070-28-5	437070-29-6	437070-30-9	437070-31-0
	437070-32-1	437070-33-2	437070-34-3	437070-35-4	437070-36-5
	437070-37-6	437070-38-7	437070-39-8	437070-40-1	437070-41-2
	437070-42-3	437070-43-4	437070-44-5	437070-45-6	437070-46-7
	437070-47-8	437070-48-9	437070-49-0	437070-50-3	437070-51-4
	437070-52-5	437070-53-6	437070-54-7	437070-55-8	437070-56-9
	437070-57-0	437070-58-1	437070-59-2	437070-60-5	437070-61-6
	437070-62-7	437070-63-8	437070-64-9	437070-65-0	437070-66-1
	437070-67-2	437070-68-3	437070-69-4	437070-70-7	437070-71-8
	437070-72-9	437070-73-0	437070-74-1	437070-75-2	437070-76-3
	437070-77-4	437070-78-5	437070-79-6	437070-80-9	437070-81-0
	437070-82-1	437070-83-2	437070-84-3	437070-85-4	437070-86-5
	437070-87-6	437070-88-7	437070-89-8	437070-90-1	437070-91-2
	437070-92-3	437070-93-4	437070-94-5	437070-95-6	437070-96-7
	437070-97-8	437070-98-9	437070-99-0	437071-00-6	437071-01-7
	437071-02-8	437071-03-9	437071-04-0	437071-05-1	437071-06-2
	437071-07-3	437071-08-4	437071-09-5	437071-10-8	437071-11-9
	437071-12-0	437071-13-1	437071-14-2	437071-15-3	437071-16-4
	437071-17-5	437071-18-6	437071-19-7	437071-20-0	437071-21-1
	437071-22-2	437071-23-3	437071-24-4	437071-25-5	437071-26-6
	437071-27-7	437071-28-8	437071-29-9	437071-30-2	437071-31-3
	437071-32-4	437071-33-5	437071-34-6	437071-35-7	437071-36-8
	437071-37-9	437071-38-0	437071-39-1	437071-40-4	437071-41-5
	437071-42-6	437071-43-7	437071-44-8	437071-45-9	437071-46-0

437071-47-1	437071-48-2	437071-49-3	437071-50-6	437071-51-7
437071-52-8	437071-53-9	437071-54-0	437071-55-1	437071-56-2
437071-57-3	437071-58-4	437071-59-5	437071-60-8	437071-61-9
437071-62-0	437071-63-1	437071-64-2	437071-65-3	437071-66-4
437071-67-5	437071-68-6	437071-69-7	437071-70-0	437071-71-1
437071-72-2	437071-73-3	437071-74-4	437071-75-5	437071-76-6
437071-77-7	437071-78-8	437071-79-9	437071-80-2	437071-81-3
437071-82-4	437071-83-5	437071-84-6	437071-85-7	437071-86-8
437071-87-9	437071-88-0			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437071-89-1	437071-90-4	437071-91-5	437071-92-6	437071-93-7
	437071-94-8	437071-95-9	437071-96-0	437071-97-1	437071-98-2
	437071-99-3	437072-00-9	437072-01-0	437072-02-1	437072-03-2
	437072-04-3	437072-05-4	437072-06-5	437072-07-6	437072-08-7
	437072-09-8	437072-10-1	437072-11-2	437072-12-3	437072-13-4
	437072-14-5	437072-15-6	437072-16-7	437072-17-8	437072-18-9
	437072-19-0	437072-20-3	437072-21-4	437072-22-5	437072-23-6
	437072-24-7	437072-25-8	437072-26-9	437072-27-0	437072-28-1
	437072-29-2	437072-30-5	437072-31-6	437072-32-7	437072-33-8
	437072-34-9	437072-35-0	437072-36-1	437072-37-2	437072-38-3
	437072-39-4	437072-40-7	437072-41-8	437072-42-9	437072-43-0
	437072-44-1	437072-45-2	437072-46-3	437072-47-4	437072-48-5
	437072-49-6	437072-50-9	437072-51-0	437072-52-1	437072-53-2
	437072-54-3	437072-55-4	437072-56-5	437072-57-6	437072-58-7
	437072-59-8	437072-60-1	437072-61-2	437072-62-3	437072-63-4
	437072-64-5	437072-65-6	437072-66-7	437072-67-8	437072-68-9
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	437072-74-7	437072-75-8	437072-76-9	437072-77-0	437072-78-1
	437072-79-2	437072-80-5	437072-81-6	437072-82-7	437072-83-8
	437072-84-9	437072-85-0	437072-86-1	437072-87-2	437072-88-3
	437072-89-4	437072-90-7	437072-91-8	437072-92-9	437072-93-0
	437072-94-1	437072-95-2	437072-96-3	437072-97-4	437072-98-5
	437072-99-6	437073-00-2	437073-01-3	437073-02-4	437073-03-5
	437073-04-6	437073-05-7	437073-06-8	437073-07-9	437073-08-0
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	437073-14-8	437073-15-9	437073-16-0	437073-17-1	437073-18-2
	437073-19-3	437073-20-6	437073-21-7	437073-22-8	437073-23-9
	437073-24-0	437073-25-1	437073-26-2	437073-27-3	437073-28-4
	437073-29-5	437073-30-8	437073-31-9	437073-32-0	437073-33-1
	437073-34-2	437073-35-3	437073-36-4	437073-37-5	437073-38-6
	437073-39-7	437073-40-0	437073-41-1	437073-42-2	437073-43-3
	437073-44-4	437073-45-5	437073-46-6	437073-47-7	437073-48-8
	437073-49-9	437073-50-2	437073-51-3	437073-52-4	437073-53-5
	437073-54-6	437073-55-7	437073-56-8	437073-57-9	437073-58-0
	437073-59-1	437073-60-4	437073-61-5	437073-62-6	437073-63-7
	437073-64-8	437073-65-9	437073-66-0	437073-67-1	437073-68-2
	437073-69-3	437073-70-6	437073-71-7	437073-72-8	437073-73-9
	437073-74-0	437073-75-1	437073-76-2	437073-77-3	437073-78-4
	437073-79-5	437073-80-8	437073-81-9	437073-82-0	437073-83-1
	437073-84-2	437073-85-3	437073-86-4	437073-87-5	437073-88-6
	437073-89-7	437073-90-0	437073-91-1	437073-92-2	437073-93-3
	437073-94-4	437073-95-5	437073-96-6	437073-97-7	437073-98-8
	437073-99-9	437074-00-5	437074-01-6	437074-02-7	437074-03-8
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	437074-14-1	437074-15-2	437074-16-3	437074-17-4	437074-18-5
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	437074-24-3	437074-25-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT	437074-26-5	437074-27-6	437074-28-7	437074-29-8	437074-30-1
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437074-41-4	437074-42-5	437074-43-6	437074-44-7	437074-45-8
437074-46-9	437074-47-0	437074-48-1	437074-49-2	437074-50-5
437074-51-6	437074-52-7	437074-53-8	437074-54-9	437074-55-0
437074-56-1	437074-57-2	437074-58-3	437074-59-4	437074-60-7
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
probes useful for gene expression anal.)

IT 400778-72-5

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
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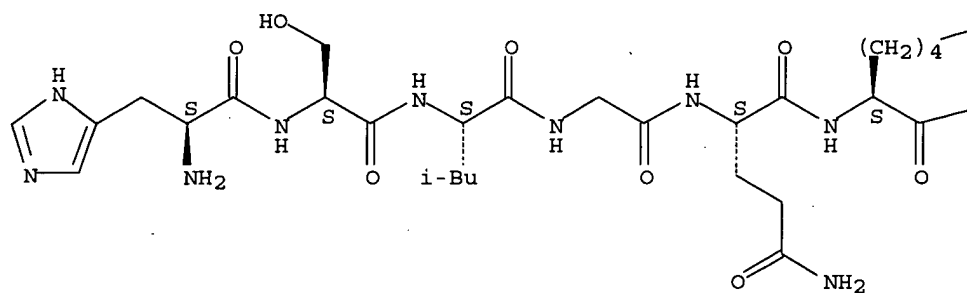
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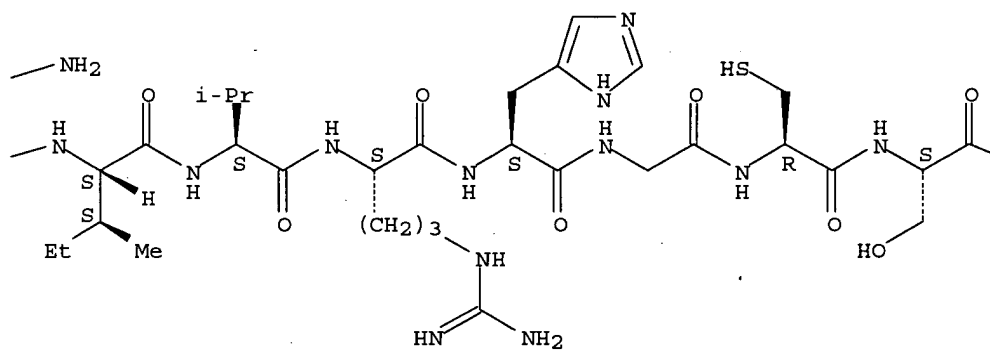
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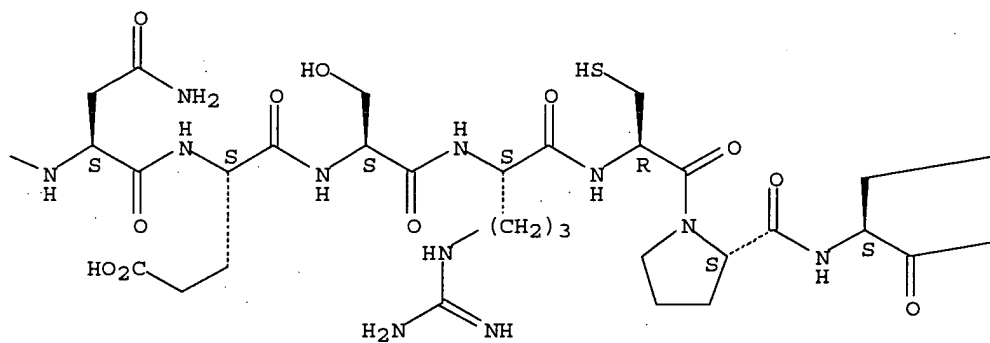
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PAGE 1-B



PAGE 1-C



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 AB A single exon nucleic acid microarray comprising 5205 single exon nucleic acid probes for measuring gene expression in a sample derived from human BT 474 cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chemical structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human BT 474 cells. Also described are 5112 single exon nucleic acid probes and 5121 proteins expressed in the BT 474 cells and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addition, methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstract record is one of three records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].
 ST genome exon probe microarray gene expression BT474 cell; sequence genome exon probe human breast
 IT Mammary gland
 (BT 474 cells derived from; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Animal cell line
 (BT 474; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Genetic element
 RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (exon; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT DNA microarray technology
 DNA sequences
 Protein sequences
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Probes (nucleic acid)
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Human
 (spatially addressable substrate; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)
 IT Glass, uses
 Plastics, uses
 RL: DEV (Device component use); USES (Uses)
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398161-12-1	398161-13-2	398161-14-3	398161-15-4	398161-16-5
	398161-17-6	398161-18-7	398161-19-8	398161-20-1	398161-21-2
	398161-22-3	398161-23-4	398161-24-5	398161-25-6	398161-26-7
	398161-27-8	398161-28-9	398161-29-0	398161-30-3	398161-31-4
	398161-32-5	398161-33-6	398161-34-7	398161-35-8	398161-36-9
	398161-37-0	398161-38-1	398161-39-2	398161-40-5	398161-41-6
	398161-42-7	398161-43-8	398161-44-9	398161-45-0	398161-46-1
	398161-47-2	398161-48-3	398161-49-4	398161-50-7	398161-51-8
	398161-52-9	398161-53-0	398161-54-1	398161-55-2	398161-56-3
	398161-57-4	398161-58-5	398161-59-6	398161-60-9	398161-61-0
	398161-62-1	398161-63-2	398161-64-3	398161-65-4	398161-66-5
	398161-67-6	398161-68-7	398161-69-8	398161-70-1	398161-71-2
	398161-72-3	398161-73-4	398161-74-5	398161-75-6	398161-76-7
	398161-77-8	398161-78-9	398161-79-0	398161-80-3	398161-81-4

398161-82-5	398161-83-6	398161-84-7	398161-85-8	398161-86-9
398161-87-0	398161-88-1	398161-89-2	398161-90-5	398161-91-6
398161-92-7	398161-93-8	398161-94-9	398161-95-0	398161-96-1
398161-97-2	398161-98-3	398161-99-4	398162-00-0	398162-01-1
398162-02-2	398162-03-3	398162-04-4	398162-05-5	398162-06-6
398162-07-7	398162-08-8	398162-09-9	398162-10-2	398162-11-3
398162-12-4	398162-13-5	398162-14-6	398162-15-7	398162-16-8
398162-17-9	398162-18-0	398162-19-1	398162-21-5	398162-22-6
398162-23-7	398162-24-8	398162-26-0	398162-27-1	398162-28-2
398162-29-3	398162-30-6	398162-31-7	398162-32-8	398162-33-9
398162-34-0	398162-36-2	398162-37-3	398162-38-4	398162-39-5
398162-40-8	398162-41-9	398162-42-0	398162-43-1	398162-44-2
398162-45-3	398162-46-4	398162-47-5	398162-48-6	398162-49-7
398162-50-0	398162-51-1	398162-52-2	398162-53-3	398162-54-4
398162-55-5	398162-56-6	398162-57-7	398162-58-8	398162-59-9
398162-60-2	398162-61-3	398162-62-4	398162-63-5	398162-64-6
398162-65-7	398162-66-8	398162-67-9	398162-68-0	398162-69-1
398162-70-4	398162-71-5	398162-72-6	398162-73-7	398162-74-8
398162-75-9	398162-76-0	398162-77-1	398162-78-2	398162-79-3
398162-80-6	398162-81-7	398162-82-8	398162-83-9	398162-84-0
398162-85-1	398162-86-2	398162-87-3	398162-88-4	398162-89-5
398162-90-8	398162-91-9	398162-92-0	398162-93-1	398162-94-2
398162-95-3	398162-96-4	398162-97-5	398162-98-6	398162-99-7
398163-00-3	398163-01-4	398163-02-5	398163-03-6	398163-04-7
398163-05-8	398163-06-9	398163-07-0	398163-08-1	398163-09-2
398163-10-5	398163-11-6	398163-12-7	398163-13-8	398163-14-9
398163-15-0	398163-16-1	398163-17-2	398163-18-3	398163-19-4
398163-20-7	398163-21-8	398163-22-9	398163-23-0	398163-24-1
398163-25-2	398163-26-3	398163-27-4	398163-28-5	398163-29-6
398163-30-9	398163-31-0	398163-32-1	398163-33-2	398163-34-3
398163-35-4	398163-36-5	398163-37-6	398163-38-7	398163-39-8
398163-40-1	398163-41-2	398163-42-3	398163-43-4	398163-44-5
398163-45-6	398163-46-7	398163-47-8	398163-48-9	398163-49-0
398163-50-3	398163-51-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398163-52-5	398163-53-6	398163-54-7	398163-55-8	398163-56-9
	398163-57-0	398163-58-1	398163-59-2	398163-60-5	398163-61-6
	398163-62-7	398163-63-8	398163-64-9	398163-65-0	398163-66-1
	398163-67-2	398163-68-3	398163-69-4	398163-70-7	398163-71-8
	398163-72-9	398163-73-0	398163-74-1	398163-75-2	398163-76-3
	398163-77-4	398163-78-5	398163-79-6	398163-80-9	398163-81-0
	398163-82-1	398163-83-2	398163-84-3	398163-85-4	398163-86-5
	398163-87-6	398163-88-7	398163-89-8	398163-90-1	398163-91-2
	398163-92-3	398163-93-4	398163-94-5	398163-95-6	398163-96-7
	398163-97-8	398163-98-9	398163-99-0	398164-00-6	398164-01-7
	398164-02-8	398164-03-9	398164-04-0	398164-05-1	398164-06-2
	398164-07-3	398164-08-4	398164-09-5	398164-10-8	398164-11-9
	398164-12-0	398164-13-1	398164-14-2	398164-15-3	398164-16-4
	398164-17-5	398164-18-6	398164-19-7	398164-20-0	398164-21-1
	398164-22-2	398164-23-3	398164-24-4	398164-25-5	398164-26-6
	398164-27-7	398164-28-8	398164-29-9	398164-30-2	398164-31-3
	398164-32-4	398164-33-5	398164-34-6	398164-35-7	398164-36-8
	398164-37-9	398164-38-0	398164-39-1	398164-40-4	398164-41-5
	398164-42-6	398164-43-7	398164-44-8	398164-45-9	398164-46-0
	398164-47-1	398164-48-2	398164-49-3	398164-50-6	398164-51-7
	398164-52-8	398164-53-9	398164-54-0	398164-55-1	398164-56-2
	398164-57-3	398164-58-4	398164-59-5	398164-60-8	398164-61-9
	398164-62-0	398164-63-1	398164-64-2	398164-65-3	398164-66-4
	398164-67-5	398164-68-6	398164-69-7	398164-70-0	398164-71-1
	398164-72-2	398164-73-3	398164-74-4	398164-75-5	398164-76-6
	398164-77-7	398164-78-8	398164-79-9	398164-80-2	398164-81-3
	398164-82-4	398164-83-5	398164-84-6	398164-85-7	398164-86-8

398164-87-9	398164-88-0	398164-89-1	398164-90-4	398164-91-5
398164-92-6	398164-93-7	398164-94-8	398164-95-9	398164-96-0
398164-97-1	398164-98-2	398164-99-3	398165-00-9	398165-01-0
398165-02-1	398165-03-2	398165-04-3	398165-05-4	398165-06-5
398165-07-6	398165-08-7	398165-09-8	398165-10-1	398165-11-2
398165-12-3	398165-13-4	398165-14-5	398165-15-6	398165-16-7
398165-17-8	398165-18-9	398165-19-0	398165-20-3	398165-21-4
398165-22-5	398165-23-6	398165-24-7	398165-25-8	398165-26-9
398165-27-0	398165-28-1	398165-29-2	398165-30-5	398165-31-6
398165-32-7	398165-33-8	398165-34-9	398165-35-0	398165-36-1
398165-37-2	398165-38-3	398165-39-4	398165-40-7	398165-41-8
398165-42-9	398165-43-0	398165-44-1	398165-45-2	398165-46-3
398165-47-4	398165-48-5	398165-49-6	398165-50-9	398165-51-0
398165-52-1	398165-53-2	398165-54-3	398165-55-4	398165-56-5
398165-57-6	398165-58-7	398165-59-8	398165-60-1	398165-61-2
398165-62-3	398165-63-4	398165-64-5	398165-65-6	398165-66-7
398165-67-8	398165-68-9	398165-69-0	398165-70-3	398165-71-4
398165-72-5	398165-73-6	398165-74-7	398165-75-8	398165-76-9
398165-77-0	398165-78-1	398165-79-2	398165-80-5	398165-81-6
398165-82-7	398165-83-8	398165-84-9	398165-85-0	398165-86-1
398165-87-2	398165-88-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398165-89-4	398165-90-7	398165-91-8	398165-92-9	398165-93-0
	398165-94-1	398165-95-2	398165-96-3	398165-97-4	398165-98-5
	398165-99-6	398166-00-2	398166-01-3	398166-02-4	398166-03-5
	398166-04-6	398166-05-7	398166-06-8	398166-07-9	398166-08-0
	398166-09-1	398166-10-4	398166-11-5	398166-12-6	398166-13-7
	398166-14-8	398166-15-9	398166-16-0	398166-17-1	398166-18-2
	398166-19-3	398166-20-6	398166-21-7	398166-22-8	398166-23-9
	398166-24-0	398166-25-1	398166-26-2	398166-27-3	398166-28-4
	398166-29-5	398166-30-8	398166-31-9	398166-32-0	398166-33-1
	398166-34-2	398166-35-3	398166-36-4	398166-37-5	398166-38-6
	398166-39-7	398166-40-0	398166-41-1	398166-42-2	398166-43-3
	398166-44-4	398166-45-5	398166-46-6	398166-47-7	398166-48-8
	398166-49-9	398166-50-2	398166-51-3	398166-52-4	398166-53-5
	398166-54-6	398166-55-7	398166-56-8	398166-57-9	398166-58-0
	398166-59-1	398166-60-4	398166-61-5	398166-62-6	398166-63-7
	398166-64-8	398166-65-9	398166-66-0	398166-67-1	398166-68-2
	398166-69-3	398166-70-6	398166-71-7	398166-72-8	398166-73-9
	398166-74-0	398166-75-1	398166-76-2	398166-77-3	398166-78-4
	398166-79-5	398166-80-8	398166-81-9	398166-82-0	398166-83-1
	398166-84-2	398166-85-3	398166-86-4	398166-87-5	398166-88-6
	398166-89-7	398166-90-0	398166-91-1	398166-92-2	398166-93-3
	398166-94-4	398166-95-5	398166-96-6	398166-97-7	398166-98-8
	398166-99-9	398167-00-5	398167-01-6	398167-02-7	398167-03-8
	398167-04-9	398167-05-0	398167-06-1	398167-07-2	398167-08-3
	398167-09-4	398167-10-7	398167-11-8	398167-12-9	398167-13-0
	398167-14-1	398167-15-2	398167-16-3	398167-17-4	398167-18-5
	398167-19-6	398167-20-9	398167-21-0	398167-22-1	398167-23-2
	398167-24-3	398167-25-4	398167-26-5	398167-27-6	398167-28-7
	398167-29-8	398167-30-1	398167-31-2	398167-32-3	398167-33-4
	398167-34-5	398167-35-6	398167-36-7	398167-37-8	398167-38-9
	398167-39-0	398167-40-3	398167-41-4	398167-42-5	398167-43-6
	398167-44-7	398167-45-8	398167-46-9	398167-47-0	398167-48-1
	398167-49-2	398167-50-5	398167-51-6	398167-52-7	398167-53-8
	398167-54-9	398167-55-0	398167-56-1	398167-57-2	398167-58-3
	398167-59-4	398167-60-7	398167-61-8	398167-62-9	398167-63-0
	398167-64-1	398167-65-2	398167-66-3	398167-67-4	398167-68-5
	398167-69-6	398167-70-9	398167-71-0	398167-72-1	398167-73-2
	398167-74-3	398167-75-4	398167-76-5	398167-77-6	398167-78-7
	398167-79-8	398167-80-1	398167-81-2	398167-82-3	398167-83-4
	398167-84-5	398167-85-6	398167-86-7	398167-87-8	398167-88-9

398167-89-0	398167-90-3	398167-91-4	398167-92-5	398167-93-6
398167-94-7	398167-95-8	398167-96-9	398167-97-0	398167-98-1
398167-99-2	398168-00-8	398168-01-9	398168-02-0	398168-03-1
398168-04-2	398168-05-3	398168-06-4	398168-07-5	398168-08-6
398168-09-7	398168-10-0	398168-11-1	398168-12-2	398168-13-3
398168-14-4	398168-15-5	398168-16-6	398168-17-7	398168-18-8
398168-19-9	398168-20-2	398168-21-3	398168-22-4	398168-23-5
398168-24-6	398168-25-7			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398168-26-8	398168-27-9	398168-28-0	398168-29-1	398168-30-4
	398168-31-5	398168-32-6	398168-33-7	398168-34-8	398168-35-9
	398168-36-0	398168-37-1	398168-38-2	398168-39-3	398168-40-6
	398168-41-7	398168-42-8	398168-43-9	398168-44-0	398168-45-1
	398168-46-2	398168-47-3	398168-48-4	398168-49-5	398168-50-8
	398168-51-9	398168-52-0	398168-53-1	398168-54-2	398168-55-3
	398168-56-4	398168-57-5	398168-58-6	398168-59-7	398168-60-0
	398168-61-1	398168-62-2	398168-63-3	398168-64-4	398168-65-5
	398168-66-6	398168-67-7	398168-68-8	398168-69-9	398168-70-2
	398168-71-3	398168-72-4	398168-73-5	398168-74-6	398168-75-7
	398168-76-8	398168-77-9	398168-78-0	398168-79-1	398168-80-4
	398168-81-5	398168-82-6	398168-83-7	398168-84-8	398168-85-9
	398168-86-0	398168-87-1	398168-88-2	398168-89-3	398168-90-6
	398168-91-7	398168-92-8	398168-93-9	398168-94-0	398168-95-1
	398168-96-2	398168-97-3	398168-98-4	398168-99-5	398169-00-1
	398169-01-2	398169-02-3	398169-03-4	398169-04-5	398169-05-6
	398169-06-7	398169-07-8	398169-08-9	398169-09-0	398169-10-3
	398169-11-4	398169-12-5	398169-13-6	398169-14-7	398169-15-8
	398169-16-9	398169-17-0	398169-18-1	398169-19-2	398169-20-5
	398169-21-6	398169-22-7	398169-23-8	398169-24-9	398169-25-0
	398169-26-1	398169-27-2	398169-28-3	398169-29-4	398169-30-7
	398169-31-8	398169-32-9	398169-33-0	398169-34-1	398169-35-2
	398169-36-3	398169-37-4	398169-38-5	398169-39-6	398169-40-9
	398169-41-0	398169-42-1	398169-43-2	398169-44-3	398169-45-4
	398169-46-5	398169-47-6	398169-48-7	398169-49-8	398169-50-1
	398169-51-2	398169-52-3	398169-53-4	398169-54-5	398169-55-6
	398169-56-7	398169-57-8	398169-58-9	398169-59-0	398169-60-3
	398169-61-4	398169-62-5	398169-63-6	398169-64-7	398169-65-8
	398169-66-9	398169-67-0	398169-68-1	398169-69-2	398169-70-5
	398169-71-6	398169-72-7	398169-73-8	398169-74-9	398169-75-0
	398169-76-1	398169-77-2	398169-78-3	398169-79-4	398169-80-7
	398169-81-8	398169-82-9	398169-83-0	398169-84-1	398169-85-2
	398169-86-3	398169-87-4	398169-88-5	398169-89-6	398169-90-9
	398169-91-0	398169-92-1	398169-93-2	398169-94-3	398169-95-4
	398169-96-5	398169-97-6	398169-98-7	398169-99-8	398170-00-8
	398170-01-9	398170-02-0	398170-03-1	398170-04-2	398170-05-3
	398170-06-4	398170-07-5	398170-08-6	398170-09-7	398170-10-0
	398170-11-1	398170-12-2	398170-13-3	398170-14-4	398170-15-5
	398170-16-6	398170-17-7	398170-18-8	398170-19-9	398170-20-2
	398170-21-3	398170-22-4	398170-23-5	398170-24-6	398170-25-7
	398170-26-8	398170-27-9	398170-28-0	398170-29-1	398170-30-4
	398170-31-5	398170-32-6	398170-33-7	398170-34-8	398170-35-9
	398170-36-0	398170-37-1	398170-38-2	398170-39-3	398170-40-6
	398170-41-7	398170-42-8	398170-43-9	398170-44-0	398170-45-1
	398170-46-2	398170-47-3	398170-48-4	398170-49-5	398170-50-8
	398170-51-9	398170-52-0	398170-53-1	398170-54-2	398170-55-3
	398170-56-4	398170-57-5	398170-58-6	398170-59-7	398170-60-0
	398170-61-1	398170-62-2			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398170-63-3	398170-64-4	398170-65-5	398170-66-6	398170-67-7
	398170-68-8	398170-69-9	398170-70-2	398170-71-3	398170-72-4
	398170-73-5	398170-74-6	398170-75-7	398170-76-8	398170-77-9
	398170-78-0	398170-79-1	398170-80-4	398170-81-5	398170-82-6
	398170-83-7	398170-84-8	398170-85-9	398170-86-0	398170-87-1
	398170-88-2	398170-89-3	398170-90-6	398170-91-7	398170-92-8
	398170-93-9	398170-94-0	398170-95-1	398170-96-2	398170-97-3
	398170-98-4	398170-99-5	398171-00-1	398171-01-2	398171-02-3
	398171-03-4	398171-04-5	398171-05-6	398171-06-7	398171-07-8
	398171-08-9	398171-09-0	398171-10-3	398171-11-4	398171-12-5
	398171-13-6	398171-14-7	398171-15-8	398171-16-9	398171-17-0
	398171-18-1	398171-19-2	398171-20-5	398171-21-6	398171-22-7
	398171-23-8	398171-24-9	398171-25-0	398171-26-1	398171-27-2
	398171-28-3	398171-29-4	398171-30-7	398171-31-8	398171-32-9
	398171-33-0	398171-34-1	398171-35-2	398171-36-3	398171-37-4
	398171-38-5	398171-39-6	398171-40-9	398171-41-0	398171-42-1
	398171-43-2	398171-44-3	398171-45-4	398171-46-5	398171-47-6
	398171-48-7	398171-49-8	398171-50-1	398171-51-2	398171-52-3
	398171-53-4	398171-54-5	398171-55-6	398171-56-7	398171-57-8
	398171-58-9	398171-59-0	398171-60-3	398171-61-4	398171-62-5
	398171-63-6	398171-64-7	398171-65-8	398171-66-9	398171-67-0
	398171-68-1	398171-69-2	398171-70-5	398171-71-6	398171-72-7
	398171-73-8	398171-74-9	398171-75-0	398171-76-1	398171-77-2
	398171-78-3	398171-79-4	398171-80-7	398171-81-8	398171-82-9
	398171-83-0	398171-84-1	398171-85-2	398171-86-3	398171-87-4
	398171-88-5	398171-89-6	398171-90-9	398171-91-0	398171-92-1
	398171-93-2	398171-94-3	398171-95-4	398171-96-5	398171-97-6
	398171-98-7	398171-99-8	398172-00-4	398172-01-5	398172-02-6
	398172-03-7	398172-04-8	398172-05-9	398172-06-0	398172-07-1
	398172-08-2	398172-09-3	398172-10-6	398172-11-7	398172-12-8
	398172-13-9	398172-14-0	398172-15-1	398172-16-2	398172-17-3
	398172-18-4	398172-19-5	398172-20-8	398172-21-9	398172-22-0
	398172-23-1	398172-24-2	398172-25-3	398172-26-4	398172-27-5
	398172-28-6	398172-29-7	398172-30-0	398172-31-1	398172-32-2
	398172-33-3	398172-34-4	398172-35-5	398172-36-6	398172-37-7
	398172-38-8	398172-39-9	398172-40-2	398172-41-3	398172-42-4
	398172-43-5	398172-44-6	398172-45-7	398172-46-8	398172-47-9
	398172-48-0	398172-49-1	398172-50-4	398172-51-5	398172-52-6
	398172-53-7	398172-54-8	398172-55-9	398172-56-0	398172-57-1
	398172-58-2	398172-59-3	398172-60-6	398172-61-7	398172-62-8
	398172-63-9	398172-64-0	398172-65-1	398172-66-2	398172-67-3
	398172-68-4	398172-69-5	398172-70-8	398172-71-9	398172-72-0
	398172-73-1	398172-74-2	398172-75-3	398172-76-4	398172-77-5
	398172-78-6	398172-79-7	398172-80-0	398172-81-1	398172-82-2
	398172-83-3	398172-84-4	398172-85-5	398172-86-6	398172-87-7
	398172-88-8	398172-89-9	398172-90-2	398172-91-3	398172-92-4
	398172-93-5	398172-94-6	398172-95-7	398172-96-8	398172-97-9
	398172-98-0	398172-99-1			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)

IT	398173-00-7	398173-01-8	398173-02-9	398173-03-0	398173-04-1
	398173-05-2	398173-06-3	398173-07-4	398173-08-5	398173-09-6
	398173-10-9	398173-11-0	398173-12-1	398173-13-2	398173-14-3
	398173-15-4	398173-16-5	398173-17-6	398173-18-7	398173-19-8
	398173-20-1	398173-21-2	398173-22-3	398173-23-4	398173-24-5
	398173-25-6	398173-26-7	398173-27-8	398173-28-9	398173-29-0
	398173-30-3	398173-31-4	398173-32-5	398173-33-6	398173-34-7
	398173-35-8	398173-36-9	398173-37-0	398173-38-1	398173-39-2
	398173-40-5	398173-41-6	398173-42-7	398173-43-8	398173-44-9
	398173-45-0	398173-46-1	398173-47-2	398173-48-3	398173-49-4
	398173-50-7	398173-51-8	398173-52-9	398173-53-0	398173-54-1
	398173-55-2	398173-56-3	398173-57-4	398173-58-5	398173-59-6
	398173-60-9	398173-61-0	398173-62-1	398173-63-2	398173-64-3

398173-65-4	398173-66-5	398173-67-6	398173-68-7	398173-69-8
398173-70-1	398173-71-2	398173-72-3	398173-73-4	398173-74-5
398173-75-6	398173-76-7	398173-77-8	398173-78-9	398173-79-0
398173-80-3	398173-81-4	398173-82-5	398173-83-6	398173-84-7
398173-85-8	398173-86-9	398173-87-0	398173-88-1	398173-89-2
398173-90-5	398173-91-6	398173-92-7	398173-93-8	398173-94-9
398173-95-0	398173-96-1	398173-97-2	398173-98-3	398173-99-4
398174-00-0	398174-01-1	398174-02-2	398174-03-3	398174-04-4
398174-05-5	398174-06-6	398174-07-7	398174-08-8	398174-09-9
398174-10-2	398174-11-3	398174-12-4	398174-13-5	398174-14-6
398174-15-7	398174-16-8	398174-17-9	398174-18-0	398174-19-1
398174-20-4	398174-21-5	398174-22-6	398174-23-7	398174-24-8
398174-25-9	398174-26-0	398174-27-1	398174-28-2	398174-29-3
398174-30-6	398174-31-7	398174-32-8	398174-33-9	398174-34-0
398174-35-1	398174-36-2	398174-37-3	398174-38-4	398174-39-5
398174-40-8	398174-41-9	398174-42-0	398174-43-1	398174-44-2
398174-45-3	398174-46-4	398174-47-5	398174-48-6	398174-49-7
398174-50-0	398174-51-1	398174-52-2	398174-53-3	398174-54-4
398174-55-5	398174-56-6	398174-57-7	398174-58-8	398174-59-9
398174-60-2	398174-61-3	398174-62-4	398174-63-5	398174-64-6
398174-65-7	398174-66-8	398174-67-9	398174-68-0	398174-69-1
398174-70-4	398174-71-5	398174-72-6	398174-73-7	398174-74-8
398174-75-9	398174-76-0	398174-77-1	398174-78-2	398174-79-3
398174-80-6	398174-81-7	398174-82-8	398174-83-9	398174-84-0
398174-85-1	398174-86-2	398174-87-3	398174-88-4	398174-89-5
398174-90-8	398174-91-9	398174-92-0	398174-93-1	398174-94-2
398174-95-3	398174-96-4	398174-97-5	398174-98-6	398174-99-7
398175-00-3	398175-01-4	398175-02-5	398175-03-6	398175-04-7
398175-05-8	398175-06-9	398175-07-0	398175-08-1	398175-09-2
398175-10-5	398175-11-6	398175-12-7	398175-13-8	398175-14-9
398175-15-0	398175-16-1	398175-17-2	398175-18-3	398175-19-4
398175-20-7	398175-21-8	398175-22-9	398175-23-0	398175-24-1
398175-25-2	398175-26-3	398175-27-4	398175-28-5	398175-29-6
398175-30-9	398175-31-0	398175-32-1	398175-33-2	398175-34-3
398175-35-4	398175-36-5			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398175-37-6	398175-38-7	398175-39-8	398175-40-1	398175-41-2
	398175-42-3	398175-43-4	398175-44-5	398175-45-6	398175-46-7
	398175-47-8	398175-48-9	398175-49-0	398175-50-3	398175-51-4
	398175-52-5	398175-53-6	398175-54-7	398175-55-8	398175-56-9
	398175-57-0	398175-58-1	398175-59-2	398175-60-5	398175-61-6
	398175-62-7	398175-63-8	398175-64-9	398175-65-0	398175-66-1
	398175-67-2	398175-68-3	398175-69-4	398175-70-7	398175-71-8
	398175-72-9	398175-73-0	398175-74-1	398175-75-2	398175-76-3
	398175-77-4	398175-78-5	398175-79-6	398175-80-9	398175-81-0
	398175-82-1	398175-83-2	398175-84-3	398175-85-4	398175-86-5
	398175-87-6	398175-88-7	398175-89-8	398175-90-1	398175-91-2
	398175-92-3	398175-93-4	398175-94-5	398175-95-6	398175-96-7
	398175-97-8	398175-98-9	398175-99-0	398176-00-6	398176-01-7
	398176-02-8	398176-03-9	398176-04-0	398176-05-1	398176-06-2
	398176-07-3	398176-08-4	398176-09-5	398176-10-8	398176-11-9
	398176-12-0	398176-13-1	398176-14-2	398176-15-3	398176-16-4
	398176-17-5	398176-18-6	398176-19-7	398176-20-0	398176-21-1
	398176-22-2	398176-23-3	398176-24-4	398176-25-5	398176-26-6
	398176-27-7	398176-28-8	398176-29-9	398176-30-2	398176-31-3
	398176-32-4	398176-33-5	398176-34-6	398176-35-7	398176-36-8
	398176-37-9	398176-38-0	398176-39-1	398176-40-4	398176-41-5
	398176-42-6	398176-43-7	398176-44-8	398176-45-9	398176-46-0
	398176-47-1	398176-48-2	398176-49-3	398176-50-6	398176-51-7
	398176-52-8	398176-53-9	398176-54-0	398176-55-1	398176-56-2
	398176-57-3	398176-58-4	398176-59-5	398176-60-8	398176-61-9
	398176-62-0	398176-63-1	398176-64-2	398176-65-3	398176-66-4

398176-67-5	398176-68-6	398176-69-7	398176-70-0	398176-71-1
398176-72-2	398176-73-3	398176-74-4	398176-75-5	398176-76-6
398176-77-7	398176-78-8	398176-79-9	398176-80-2	398176-81-3
398176-82-4	398176-83-5	398176-84-6	398176-85-7	398176-86-8
398176-87-9	398176-88-0	398176-89-1	398176-90-4	398176-91-5
398176-92-6	398176-93-7	398176-94-8	398176-95-9	398176-96-0
398176-97-1	398176-98-2	398176-99-3	398177-00-9	398177-01-0
398177-02-1	398177-03-2	398177-04-3	398177-05-4	398177-06-5
398177-07-6	398177-08-7	398177-09-8	398177-10-1	398177-11-2
398177-12-3	398177-13-4	398177-14-5	398177-15-6	398177-16-7
398177-17-8	398177-18-9	398177-19-0	398177-20-3	398177-21-4
398177-22-5	398177-23-6	398177-24-7	398177-25-8	398177-26-9
398177-27-0	398177-28-1	398177-29-2	398177-30-5	398177-31-6
398177-32-7	398177-33-8	398177-34-9	398177-35-0	398177-36-1
398177-37-2	398177-38-3	398177-39-4	398177-40-7	398177-41-8
398177-42-9	398177-43-0	398177-44-1	398177-45-2	398177-46-3
398177-47-4	398177-48-5	398177-49-6	398177-50-9	398177-51-0
398177-52-1	398177-53-2	398177-54-3	398177-55-4	398177-56-5
398177-57-6	398177-58-7	398177-59-8	398177-60-1	398177-61-2
398177-62-3	398177-63-4	398177-64-5	398177-65-6	398177-66-7
398177-67-8	398177-68-9	398177-69-0	398177-70-3	398177-71-4
398177-72-5	398177-73-6			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398177-74-7	398177-75-8	398177-76-9	398177-77-0	398177-78-1
	398177-79-2	398177-80-5	398177-81-6	398177-82-7	398177-83-8
	398177-84-9	398177-85-0	398177-86-1	398177-87-2	398177-88-3
	398177-89-4	398177-90-7	398177-91-8	398177-92-9	398177-93-0
	398177-94-1	398177-95-2	398177-96-3	398177-97-4	398177-98-5
	398177-99-6	398178-00-2	398178-01-3	398178-02-4	398178-03-5
	398178-04-6	398178-05-7	398178-06-8	398178-07-9	398178-08-0
	398178-09-1	398178-10-4	398178-11-5	398178-12-6	398178-13-7
	398178-14-8	398178-15-9	398178-16-0	398178-17-1	398178-18-2
	398178-19-3	398178-20-6	398178-21-7	398178-22-8	398178-23-9
	398178-24-0	398178-25-1	398178-26-2	398178-27-3	398178-28-4
	398178-29-5	398178-30-8	398178-31-9	398178-32-0	398178-33-1
	398178-34-2	398178-35-3	398178-36-4	398178-37-5	398178-38-6
	398178-39-7	398178-40-0	398178-41-1	398178-42-2	398178-43-3
	398178-44-4	398178-45-5	398178-46-6	398178-47-7	398178-48-8
	398178-49-9	398178-50-2	398178-51-3	398178-52-4	398178-53-5
	398178-54-6	398178-55-7	398178-56-8	398178-57-9	398178-58-0
	398178-59-1	398178-60-4	398178-61-5	398178-62-6	398178-63-7
	398178-64-8	398178-65-9	398178-66-0	398178-67-1	398178-68-2
	398178-69-3	398178-70-6	398178-71-7	398178-72-8	398178-73-9
	398178-74-0	398178-75-1	398178-76-2	398178-77-3	398178-78-4
	398178-79-5	398178-80-8	398178-81-9	398178-82-0	398178-83-1
	398178-84-2	398178-85-3	398178-86-4	398178-87-5	398178-88-6
	398178-89-7	398178-90-0	398178-91-1	398178-92-2	398178-93-3
	398178-94-4	398178-95-5	398178-96-6	398178-97-7	398178-98-8
	398178-99-9	398179-00-5	398179-01-6	398179-02-7	398179-03-8
	398179-04-9	398179-05-0	398179-06-1	398179-07-2	398179-08-3
	398179-09-4	398179-10-7	398179-11-8	398179-12-9	398179-13-0
	398179-14-1	398179-15-2	398179-16-3	398179-17-4	398179-18-5
	398179-19-6	398179-20-9	398179-21-0	398179-22-1	398179-23-2
	398179-24-3	398179-25-4	398179-26-5	398179-27-6	398179-28-7
	398179-29-8	398179-30-1	398179-31-2	398179-32-3	398179-33-4
	398179-34-5	398179-35-6	398179-36-7	398179-37-8	398179-38-9
	398179-39-0	398179-40-3	398179-41-4	398179-42-5	398179-43-6
	398179-44-7	398179-45-8	398179-46-9	398179-47-0	398179-48-1
	398179-49-2	398179-50-5	398179-51-6	398179-52-7	398179-53-8
	398179-54-9	398179-55-0	398179-56-1	398179-57-2	398179-58-3
	398179-59-4	398179-60-7	398179-61-8	398179-62-9	398179-63-0
	398179-64-1	398179-65-2	398179-66-3	398179-67-4	398179-68-5

398179-69-6	398179-70-9	398179-71-0	398179-72-1	398179-73-2
398179-74-3	398179-75-4	398179-76-5	398179-77-6	398179-78-7
398179-79-8	398179-80-1	398179-81-2	398179-82-3	398179-83-4
398179-84-5	398179-85-6	398179-86-7	398179-87-8	398179-88-9
398179-89-0	398179-90-3	398179-91-4	398179-92-5	398179-93-6
398179-94-7	398179-95-8	398179-96-9	398179-97-0	398179-98-1
398179-99-2	398180-00-2	398180-01-3	398180-02-4	398180-03-5
398180-04-6	398180-05-7	398180-06-8	398180-07-9	398180-08-0
398180-09-1	398180-10-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398180-11-5	398180-12-6	398180-13-7	398180-14-8	398180-15-9
	398180-16-0	398180-17-1	398180-18-2	398180-19-3	398180-20-6
	398180-21-7	398180-22-8	398180-23-9	398180-24-0	398180-25-1
	398180-26-2	398180-27-3	398180-28-4	398180-29-5	398180-30-8
	398180-31-9	398180-32-0	398180-33-1	398180-34-2	398180-35-3
	398180-36-4	398180-37-5	398180-38-6	398180-39-7	398180-40-0
	398180-41-1	398180-42-2	398180-43-3	398180-44-4	398180-45-5
	398180-46-6	398180-47-7	398180-48-8	398180-49-9	398180-50-2
	398180-51-3	398180-52-4	398180-53-5	398180-54-6	398180-55-7
	398180-56-8	398180-57-9	398180-58-0	398180-59-1	398180-60-4
	398180-61-5	398180-62-6	398180-63-7	398180-64-8	398180-65-9
	398180-66-0	398180-67-1	398180-68-2	398180-69-3	398180-70-6
	398180-71-7	398180-72-8	398180-73-9	398180-74-0	398180-75-1
	398180-76-2	398180-77-3	398180-78-4	398180-79-5	398180-80-8
	398180-81-9	398180-82-0	398180-83-1	398180-84-2	398180-85-3
	398180-86-4	398180-87-5	398180-88-6	398180-89-7	398180-90-0
	398180-91-1	398180-92-2	398180-93-3	398180-94-4	398180-95-5
	398180-96-6	398180-97-7	398180-98-8	398180-99-9	398181-00-5
	398181-01-6	398181-02-7	398181-03-8	398181-04-9	398181-05-0
	398181-06-1	398181-07-2	398181-08-3	398181-09-4	398181-10-7
	398181-11-8	398181-12-9	398181-13-0	398181-14-1	398181-15-2
	398181-16-3	398181-17-4	398181-18-5	398181-19-6	398181-20-9
	398181-21-0	398181-22-1	398181-23-2	398181-24-3	398181-25-4
	398181-26-5	398181-27-6	398181-28-7	398181-29-8	398181-30-1
	398181-31-2	398181-32-3	398181-33-4	398181-34-5	398181-35-6
	398181-36-7	398181-37-8	398181-38-9	398181-39-0	398181-40-3
	398181-41-4	398181-42-5	398181-43-6	398181-44-7	398181-45-8
	398181-46-9	398181-47-0	398181-48-1	398181-49-2	398181-50-5
	398181-51-6	398181-52-7	398181-53-8	398181-54-9	398181-55-0
	398181-56-1	398181-57-2	398181-58-3	398181-59-4	398181-60-7
	398181-61-8	398181-62-9	398181-63-0	398181-64-1	398181-65-2
	398181-66-3	398181-67-4	398181-68-5	398181-69-6	398181-70-9
	398181-71-0	398181-72-1	398181-73-2	398181-74-3	398181-75-4
	398181-76-5	398181-77-6	398181-78-7	398181-79-8	398181-80-1
	398181-81-2	398181-82-3	398181-83-4	398181-84-5	398181-85-6
	398181-86-7	398181-87-8	398181-88-9	398181-89-0	398181-90-3
	398181-91-4	398181-92-5	398181-93-6	398181-94-7	398181-95-8
	398181-96-9	398181-97-0	398181-98-1	398181-99-2	398182-00-8
	398182-01-9	398182-02-0	398182-03-1	398182-04-2	398182-05-3
	398182-06-4	398182-07-5	398182-08-6	398182-09-7	398182-10-0
	398182-11-1	398182-12-2	398182-13-3	398182-14-4	398182-15-5
	398182-16-6	398182-17-7	398182-18-8	398182-19-9	398182-20-2
	398182-21-3	398182-22-4	398182-23-5	398182-24-6	398182-25-7
	398182-26-8	398182-27-9	398182-28-0	398182-29-1	398182-30-4
	398182-31-5	398182-32-6	398182-33-7	398182-34-8	398182-35-9
	398182-36-0	398182-37-1	398182-38-2	398182-39-3	398182-40-6
	398182-41-7	398182-42-8	398182-43-9	398182-44-0	398182-45-1
	398182-46-2	398182-47-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474)

	cells)				
IT	398182-48-4	398182-49-5	398182-50-8	398182-51-9	398182-52-0
	398182-53-1	398182-54-2	398182-55-3	398182-56-4	398182-57-5
	398182-58-6	398182-59-7	398182-60-0	398182-61-1	398182-62-2
	398182-63-3	398182-64-4	398182-65-5	398182-66-6	398182-67-7
	398182-68-8	398182-69-9	398182-70-2	398182-71-3	398182-72-4
	398182-73-5	398182-74-6	398182-75-7	398182-76-8	398182-77-9
	398182-78-0	398182-79-1	398182-80-4	398182-81-5	398182-82-6
	398182-83-7	398182-84-8	398182-85-9	398182-86-0	398182-87-1
	398182-88-2	398182-89-3	398182-90-6	398182-91-7	398182-92-8
	398182-93-9	398182-94-0	398182-95-1	398182-96-2	398182-97-3
	398182-98-4	398182-99-5	398183-00-1	398183-01-2	398183-02-3
	398183-03-4	398183-04-5	398183-05-6	398183-06-7	398183-07-8
	398183-08-9	398183-09-0	398183-10-3	398183-11-4	398183-12-5
	398183-13-6	398183-14-7	398183-15-8	398183-16-9	398183-17-0
	398183-18-1	398183-19-2	398183-20-5	398183-21-6	398183-22-7
	398183-23-8	398183-24-9	398183-25-0	398183-26-1	398183-27-2
	398183-28-3	398183-29-4	398183-30-7	398183-31-8	398183-32-9
	398183-33-0	398183-34-1	398183-35-2	398183-36-3	398183-37-4
	398183-38-5	398183-39-6	398183-40-9	398183-41-0	398183-42-1
	398183-43-2	398183-44-3	398183-45-4	398183-46-5	398183-47-6
	398183-48-7	398183-49-8	398183-50-1	398183-51-2	398183-52-3
	398183-53-4	398183-54-5	398183-55-6	398183-56-7	398183-57-8
	398183-58-9	398183-59-0	398183-60-3	398183-61-4	398183-62-5
	398183-63-6	398183-64-7	398183-65-8	398183-66-9	398183-67-0
	398183-68-1	398183-69-2	398183-70-5	398183-71-6	398183-72-7
	398183-73-8	398183-74-9	398183-75-0	398183-76-1	398183-77-2
	398183-78-3	398183-79-4	398183-80-7	398183-81-8	398183-82-9
	398183-83-0	398183-84-1	398183-85-2	398183-86-3	398183-87-4
	398183-88-5	398183-89-6	398183-90-9	398183-91-0	398183-92-1
	398183-93-2	398183-94-3	398183-95-4	398183-96-5	398183-97-6
	398183-98-7	398183-99-8	398184-00-4	398184-01-5	398184-02-6
	398184-03-7	398184-04-8	398184-05-9	398184-06-0	398184-07-1
	398184-08-2	398184-09-3	398184-10-6	398184-11-7	398184-12-8
	398184-13-9	398184-14-0	398184-15-1	398184-16-2	398184-17-3
	398184-18-4	398184-19-5	398184-20-8	398184-21-9	398184-22-0
	398184-23-1	398184-24-2	398184-25-3	398184-26-4	398184-27-5
	398184-28-6	398184-29-7	398184-30-0	398184-31-1	398184-32-2
	398184-33-3	398184-34-4	398184-35-5	398184-36-6	398184-37-7
	398184-38-8	398184-39-9	398184-40-2	398184-41-3	398184-42-4
	398184-43-5	398184-44-6	398184-45-7	398184-46-8	398184-47-9
	398184-48-0	398184-49-1	398184-50-4	398184-51-5	398184-52-6
	398184-53-7	398184-54-8	398184-55-9	398184-56-0	398184-57-1
	398184-58-2	398184-59-3	398184-60-6	398184-61-7	398184-62-8
	398184-63-9	398184-64-0	398184-65-1	398184-66-2	398184-67-3
	398184-68-4	398184-69-5	398184-70-8	398184-71-9	398184-72-0
	398184-73-1	398184-74-2	398184-75-3	398184-76-4	398184-77-5
	398184-78-6	398184-79-7	398184-80-0	398184-81-1	398184-82-2
	398184-83-3	398184-84-4			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398184-85-5	398184-86-6	398184-87-7	398184-88-8	398184-89-9
	398184-90-2	398184-91-3	398184-92-4	398184-93-5	398184-94-6
	398184-95-7	398184-96-8	398184-97-9	398184-98-0	398184-99-1
	398185-00-7	398185-01-8	398185-02-9	398185-03-0	398185-04-1
	398185-05-2	398185-06-3	398185-07-4	398185-08-5	398185-09-6
	398185-10-9	398185-11-0	398185-12-1	398185-13-2	398185-14-3
	398185-15-4	398185-16-5	398185-17-6	398185-18-7	398185-19-8
	398185-20-1	398185-21-2	398185-22-3	398185-23-4	398185-24-5
	398185-25-6	398185-26-7	398185-27-8	398185-28-9	398185-29-0
	398185-30-3	398185-31-4	398185-32-5	398185-33-6	398185-34-7
	398185-35-8	398185-36-9	398185-37-0	398185-38-1	398185-39-2
	398185-40-5	398185-41-6	398185-42-7	398185-43-8	398185-44-9

398185-45-0	398185-46-1	398185-47-2	398185-48-3	398185-49-4
398185-50-7	398185-51-8	398185-52-9	398185-53-0	398185-54-1
398185-55-2	398185-56-3	398185-57-4	398185-58-5	398185-59-6
398185-60-9	398185-61-0	398185-62-1	398185-63-2	398185-64-3
398185-65-4	398185-66-5	398185-67-6	398185-68-7	398185-69-8
398185-70-1	398185-71-2	398185-72-3	398185-73-4	398185-74-5
398185-75-6	398185-76-7	398185-77-8	398185-78-9	398185-79-0
398185-80-3	398185-81-4	398185-82-5	398185-83-6	398185-84-7
398185-85-8	398185-86-9	398185-87-0	398185-88-1	398185-89-2
398185-90-5	398185-91-6	398185-92-7	398185-93-8	398185-94-9
398185-95-0	398185-96-1	398185-97-2	398185-98-3	398185-99-4
398186-00-0	398186-01-1	398186-02-2	398186-03-3	398186-04-4
398186-05-5	398186-06-6	398186-07-7	398186-08-8	398186-09-9
398186-10-2	398186-11-3	398186-12-4	398186-13-5	398186-14-6
398186-15-7	398186-16-8	398186-17-9	398186-18-0	398186-19-1
398186-20-4	398186-21-5	398186-22-6	398186-23-7	398186-24-8
398186-25-9	398186-26-0	398186-27-1	398186-28-2	398186-29-3
398186-30-6	398186-31-7	398186-32-8	398186-33-9	398186-34-0
398186-35-1	398186-36-2	398186-37-3	398186-38-4	398186-39-5
398186-40-8	398186-41-9	398186-42-0	398186-43-1	398186-44-2
398186-45-3	398186-46-4	398186-47-5	398186-48-6	398186-49-7
398186-50-0	398186-51-1	398186-52-2	398186-53-3	398186-54-4
398186-55-5	398186-56-6	398186-57-7	398186-58-8	398186-59-9
398186-60-2	398186-61-3	398186-62-4	398186-63-5	398186-64-6
398186-65-7	398186-66-8	398186-67-9	398186-68-0	398186-69-1
398186-70-4	398186-71-5	398186-72-6	398186-73-7	398186-74-8
398186-75-9	398186-76-0	398186-77-1	398186-78-2	398186-79-3
398186-80-6	398186-81-7	398186-82-8	398186-83-9	398186-84-0
398186-85-1	398186-86-2	398186-87-3	398186-88-4	398186-89-5
398186-90-8	398186-91-9	398186-92-0	398186-93-1	398186-94-2
398186-95-3	398186-96-4	398186-97-5	398186-98-6	398186-99-7
398187-00-3	398187-01-4	398187-02-5	398187-03-6	398187-04-7
398187-05-8	398187-06-9	398187-07-0	398187-08-1	398187-09-2
398187-10-5	398187-11-6	398187-12-7	398187-13-8	398187-14-9
398187-15-0	398187-16-1	398187-17-2	398187-18-3	398187-19-4
398187-20-7	398187-21-8			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398187-22-9	398187-23-0	398187-24-1	398187-25-2	398187-26-3
	398187-27-4	398187-28-5	398187-29-6	398187-30-9	398187-31-0
	398187-32-1	398187-33-2	398187-34-3	398187-35-4	398187-36-5
	398187-37-6	398187-38-7	398187-39-8	398187-40-1	398187-41-2
	398187-42-3	398187-43-4	398187-44-5	398187-45-6	398187-46-7
	398187-47-8	398187-48-9	398187-49-0	398187-50-3	398187-51-4
	398187-52-5	398187-53-6	398187-54-7	398187-55-8	398187-56-9
	398187-57-0	398187-58-1	398187-59-2	398187-60-5	398187-61-6
	398187-62-7	398187-63-8	398187-64-9	398187-65-0	398187-66-1
	398187-67-2	398187-68-3	398187-69-4	398187-70-7	398187-71-8
	398187-72-9	398187-73-0	398187-74-1	398187-75-2	398187-76-3
	398187-77-4	398187-78-5	398187-79-6	398187-80-9	398187-81-0
	398187-82-1	398187-83-2	398187-84-3	398187-85-4	398187-86-5
	398187-87-6	398187-88-7	398187-89-8	398187-90-1	398187-91-2
	398187-92-3	398187-93-4	398187-94-5	398187-95-6	398187-96-7
	398187-97-8	398187-98-9	398187-99-0	398188-00-6	398188-01-7
	398188-02-8	398188-03-9	398188-04-0	398188-05-1	398188-06-2
	398188-07-3	398188-08-4	398188-09-5	398188-10-8	398188-11-9
	398188-12-0	398188-13-1	398188-14-2	398188-15-3	398188-16-4
	398188-17-5	398188-18-6	398188-19-7	398188-20-0	398188-21-1
	398188-22-2	398188-23-3	398188-24-4	398188-25-5	398188-26-6
	398188-27-7	398188-28-8	398188-29-9	398188-30-2	398188-31-3
	398188-32-4	398188-33-5	398188-34-6	398188-35-7	398188-36-8
	398188-37-9	398188-38-0	398188-39-1	398188-40-4	398188-41-5
	398188-42-6	398188-43-7	398188-44-8	398188-45-9	398188-46-0

398188-47-1	398188-48-2	398188-49-3	398188-50-6	398188-51-7
398188-52-8	398188-53-9	398188-54-0	398188-55-1	398188-56-2
398188-57-3	398188-58-4	398188-59-5	398188-60-8	398188-61-9
398188-62-0	398188-63-1	398188-64-2	398188-65-3	398188-66-4
398188-67-5	398188-68-6	398188-69-7	398188-70-0	398188-71-1
398188-72-2	398188-73-3	398188-74-4	398188-75-5	398188-76-6
398188-77-7	398188-78-8	398188-79-9	398188-80-2	398188-81-3
398188-82-4	398188-83-5	398188-84-6	398188-85-7	398188-86-8
398188-87-9	398188-88-0	398188-89-1	398188-90-4	398188-91-5
398188-92-6	398188-93-7	398188-94-8	398188-95-9	398188-96-0
398188-97-1	398188-98-2	398188-99-3	398189-00-9	398189-01-0
398189-02-1	398189-03-2	398189-04-3	398189-05-4	398189-06-5
398189-07-6	398189-08-7	398189-09-8	398189-10-1	398189-11-2
398189-12-3	398189-13-4	398189-14-5	398189-15-6	398189-16-7
398189-17-8	398189-18-9	398189-19-0	398189-20-3	398189-21-4
398189-22-5	398189-23-6	398189-24-7	398189-25-8	398189-26-9
398189-27-0	398189-28-1	398189-29-2	398189-30-5	398189-31-6
398189-32-7	398189-33-8	398189-34-9	398189-35-0	398189-36-1
398189-37-2	398189-38-3	398189-39-4	398189-40-7	398189-41-8
398189-42-9	398189-43-0	398189-44-1	398189-45-2	398189-46-3
398189-47-4	398189-48-5	398189-49-6	398189-50-9	398189-51-0
398189-52-1	398189-53-2	398189-54-3	398189-55-4	398189-56-5
398189-57-6	398189-58-7			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398189-59-8	398189-60-1	398189-61-2	398189-62-3	398189-63-4
	398189-64-5	398189-65-6	398189-66-7	398189-67-8	398189-68-9
	398189-69-0	398189-70-3	398189-71-4	398189-72-5	398189-73-6
	398189-74-7	398189-75-8	398189-76-9	398189-77-0	398189-78-1
	398189-79-2	398189-80-5	398189-81-6	398189-82-7	398189-83-8
	398189-84-9	398189-85-0	398189-86-1	398189-87-2	398189-88-3
	398189-89-4	398189-90-7	398189-91-8	398189-92-9	398189-93-0
	398189-94-1	398189-95-2	398189-96-3	398189-97-4	398189-98-5
	398189-99-6	398190-00-6	398190-01-7	398190-02-8	398190-03-9
	398190-04-0	398190-05-1	398190-06-2	398190-07-3	398190-08-4
	398190-09-5	398190-10-8	398190-11-9	398190-12-0	398190-13-1
	398190-14-2	398190-15-3	398190-16-4	398190-17-5	398190-18-6
	398190-19-7	398190-20-0	398190-21-1	398190-22-2	398190-23-3
	398190-24-4	398190-25-5	398190-26-6	398190-27-7	398190-28-8
	398190-29-9	398190-30-2	398190-31-3	398190-32-4	398190-33-5
	398190-34-6	398190-35-7	398190-36-8	398190-37-9	398190-38-0
	398190-39-1	398190-40-4	398190-41-5	398190-42-6	398190-43-7
	398190-44-8	398190-45-9	398190-46-0	398190-47-1	398190-48-2
	398190-49-3	398190-50-6	398190-51-7	398190-52-8	398190-53-9
	398190-54-0	398190-55-1	398190-56-2	398190-57-3	398190-58-4
	398190-59-5	398190-60-8	398190-61-9	398190-62-0	398190-63-1
	398190-64-2	398190-65-3	398190-66-4	398190-67-5	398190-68-6
	398190-69-7	398190-70-0	398190-71-1	398190-72-2	398190-73-3
	398190-74-4	398190-75-5	398190-76-6	398190-77-7	398190-78-8
	398190-79-9	398190-80-2	398190-81-3	398190-82-4	398190-83-5
	398190-84-6	398190-85-7	398190-86-8	398190-87-9	398190-88-0
	398190-89-1	398190-90-4	398190-91-5	398190-92-6	398190-93-7
	398190-94-8	398190-95-9	398190-96-0	398190-97-1	398190-98-2
	398190-99-3	398191-00-9	398191-01-0	398191-02-1	398191-03-2
	398191-04-3	398191-05-4	398191-06-5	398191-07-6	398191-08-7
	398191-09-8	398191-10-1	398191-11-2	398191-12-3	398191-13-4
	398191-14-5	398191-15-6	398191-16-7	398191-17-8	398191-18-9
	398191-19-0	398191-20-3	398191-21-4	398191-22-5	398191-23-6
	398191-24-7	398191-25-8	398191-26-9	398191-27-0	398191-28-1
	398191-29-2	398191-30-5	398191-31-6	398191-32-7	398191-33-8
	398191-34-9	398191-35-0	398191-36-1	398191-37-2	398191-38-3
	398191-39-4	398191-40-7	398191-41-8	398191-42-9	398191-43-0
	398191-44-1	398191-45-2	398191-46-3	398191-47-4	398191-48-5

398191-49-6	398191-50-9	398191-51-0	398191-52-1	398191-53-2
398191-54-3	398191-55-4	398191-56-5	398191-57-6	398191-58-7
398191-59-8	398191-60-1	398191-61-2	398191-62-3	398191-63-4
398191-64-5	398191-65-6	398191-66-7	398191-67-8	398191-68-9
398191-69-0	398191-70-3	398191-71-4	398191-72-5	398191-73-6
398191-74-7	398191-75-8	398191-76-9	398191-77-0	398191-78-1
398191-79-2	398191-80-5	398191-81-6	398191-82-7	398191-83-8
398191-84-9	398191-85-0	398191-86-1	398191-87-2	398191-88-3
398191-89-4	398191-90-7	398191-91-8	398191-92-9	398191-93-0
398191-94-1	398191-95-2			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	398191-96-3	398191-97-4	398191-98-5	398191-99-6	398192-00-2
	398192-01-3	398192-02-4	398192-03-5	398192-04-6	398192-05-7
	398192-06-8	398192-07-9	398192-08-0	398192-09-1	398192-10-4
	398192-11-5	398192-12-6	398192-13-7	398192-14-8	398192-15-9
	398192-16-0	398192-17-1	398192-18-2	398192-19-3	398192-20-6
	398192-21-7	398192-22-8	398192-23-9	398192-24-0	398192-25-1
	398192-26-2	398192-27-3	398192-28-4	398192-29-5	398192-30-8
	398192-31-9	398192-32-0	398192-33-1	398192-34-2	398192-35-3
	398192-36-4	398192-37-5	398192-38-6	398192-39-7	398192-40-0
	398192-41-1	398192-42-2	398192-43-3	398192-44-4	398192-45-5
	398192-46-6	398192-47-7	398192-48-8	398192-49-9	398192-50-2
	398192-51-3	398192-52-4	398192-53-5	398192-54-6	398192-55-7
	398192-56-8	398192-57-9	398192-58-0	398192-59-1	398192-60-4
	398192-61-5	398192-62-6	398192-63-7	398192-64-8	398192-65-9
	398192-66-0	398192-67-1	398192-68-2	398192-69-3	398192-70-6
	398192-71-7	398192-72-8	398192-73-9	398192-74-0	398192-75-1
	398192-76-2	398192-77-3	398192-78-4	398192-79-5	398192-80-8
	398192-81-9	398192-82-0	398192-83-1	398192-84-2	398192-85-3
	398192-86-4	398192-87-5	398192-88-6	398192-89-7	398192-90-0
	398192-91-1	398192-92-2	398192-93-3	398192-94-4	398192-95-5
	398192-96-6	398192-97-7	398192-98-8	398192-99-9	398193-00-5
	398193-01-6	398193-02-7	398193-03-8	398193-04-9	398193-05-0
	398193-06-1	398193-07-2	398193-08-3	398193-09-4	398193-10-7
	398193-11-8	398193-12-9	398193-13-0	398193-14-1	398193-15-2
	398193-16-3	398193-17-4	398193-18-5	398193-19-6	398193-20-9
	398193-21-0	398193-22-1	398193-23-2	398193-24-3	398193-25-4
	398193-26-5	398193-27-6	398193-28-7	398193-29-8	398193-30-1
	398193-31-2	398193-32-3	398193-33-4	398193-34-5	398193-35-6
	398193-36-7	398193-37-8	398193-38-9	398193-39-0	398193-40-3
	398193-41-4	398193-42-5	398193-43-6	398193-44-7	398193-45-8
	398193-46-9	398193-47-0	398193-48-1	398193-49-2	398193-50-5
	398193-51-6	398193-52-7	398193-53-8	398193-54-9	398193-55-0
	398193-56-1	398193-57-2	398193-58-3	398193-59-4	398193-60-7
	398193-61-8	398193-62-9	398193-63-0	398193-64-1	398193-65-2
	398193-66-3	398193-67-4	398193-68-5	398193-69-6	398193-70-9
	398193-71-0	398193-72-1	398193-73-2	398193-74-3	398193-75-4
	398193-76-5	398193-77-6	398193-78-7	398193-79-8	398193-80-1
	398193-81-2	398193-82-3	398193-83-4	398193-84-5	398193-85-6
	398193-86-7	398193-87-8	398193-88-9	398193-89-0	398193-90-3
	398193-91-4	398193-92-5	398193-93-6	398193-94-7	398193-95-8
	398193-96-9	398193-97-0	398193-98-1	398193-99-2	398194-00-8
	398194-01-9	398194-02-0	398194-03-1	398194-04-2	398194-05-3
	398194-06-4	398194-07-5	398194-08-6	398194-09-7	398194-10-0
	398194-11-1	398194-12-2	398194-13-3	398194-14-4	398194-15-5
	398194-16-6	398194-17-7	398194-18-8	398194-19-9	398194-20-2
	398194-21-3	398194-22-4	398194-23-5	398194-24-6	398194-25-7
	398194-26-8	398194-27-9	398194-28-0	398194-29-1	398194-30-4
	398194-31-5	398194-32-6			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid

probes useful for anal. of gene expression in human breast and BT 474 cells)

IT	398194-33-7	398194-34-8	398194-35-9	398194-36-0	398194-37-1
	398194-38-2	398194-39-3	398194-40-6	398194-41-7	398194-42-8
	398194-43-9	398194-44-0	398194-45-1	398194-46-2	398194-47-3
	398194-48-4	398194-49-5	398194-50-8	398194-51-9	398194-52-0
	398194-53-1	398194-54-2	398194-55-3	398194-56-4	398194-57-5
	398194-58-6	398194-59-7	398194-60-0	398194-61-1	398194-62-2
	398194-63-3	398194-64-4	398194-65-5	398194-66-6	398194-67-7
	398194-68-8	398194-69-9	398194-70-2	398194-71-3	398194-72-4
	398194-73-5	398194-74-6	398194-75-7	398194-76-8	398194-77-9
	398194-78-0	398194-79-1	398194-80-4	398194-81-5	398194-82-6
	398194-83-7	398194-84-8	398194-85-9	398194-86-0	398194-87-1
	398194-88-2	398194-89-3	398194-90-6	398194-91-7	398194-92-8
	398194-93-9	398194-94-0	398194-95-1	398194-96-2	398194-97-3
	398194-98-4	398194-99-5	398195-00-1	398195-01-2	398195-02-3
	398195-03-4	398195-04-5	398195-05-6	398195-06-7	398195-07-8
	398195-08-9	398195-09-0	398195-10-3	398195-11-4	398195-12-5
	398195-13-6	398195-14-7	398195-15-8	398195-16-9	398195-17-0
	398195-18-1	398195-19-2	398195-20-5	398195-21-6	398195-22-7
	398195-23-8	398195-24-9	398195-25-0	398195-26-1	398195-27-2
	398195-28-3	398195-29-4	398195-30-7	398195-31-8	398195-32-9
	398195-33-0	398195-34-1	398195-35-2	398195-36-3	398195-37-4
	398195-38-5	398195-39-6	398195-40-9	398195-41-0	398195-42-1
	398195-43-2	398195-44-3	398195-45-4	398195-46-5	398195-47-6
	398195-48-7	398195-49-8	398195-50-1	398195-51-2	398195-52-3
	398195-53-4	398195-54-5	398195-55-6	398195-56-7	398195-57-8
	398195-58-9	398195-59-0	398195-60-3	398195-61-4	398195-62-5
	398195-63-6	398195-64-7	398195-65-8	398195-66-9	398195-67-0
	398195-68-1	398195-69-2	398195-70-5	398195-71-6	398195-72-7
	398195-73-8	398195-74-9	398195-75-0	398195-76-1	398195-77-2
	398195-78-3	398195-79-4	398195-80-7	398195-81-8	398195-82-9
	398195-83-0	398195-84-1	398195-85-2	398195-86-3	398195-87-4
	398195-88-5	398195-89-6	398195-90-9	398195-91-0	398195-92-1
	398195-93-2	398195-94-3	398195-95-4	398195-96-5	398195-97-6
	398195-98-7	398195-99-8	398196-00-4	398196-01-5	398196-02-6
	398196-03-7	398196-04-8	398196-05-9	398196-06-0	398196-07-1
	398196-08-2	398196-09-3	398196-10-6	398196-11-7	398196-12-8
	398196-13-9	398196-14-0	398196-15-1	398196-16-2	398196-17-3
	398196-18-4	398196-19-5	398196-20-8	398196-21-9	398196-22-0
	398196-23-1	398196-24-2	398196-25-3	398196-26-4	398196-27-5
	398196-28-6	398196-29-7	398196-30-0	398196-31-1	398196-32-2
	398196-33-3	398196-34-4	398196-35-5	398196-36-6	398196-37-7
	398196-38-8	398196-39-9	398196-40-2	398196-41-3	398196-42-4
	398196-43-5	398196-44-6	398196-45-7	398196-46-8	398196-47-9
	398196-48-0	398196-49-1	398196-50-4	398196-51-5	398196-52-6
	398196-53-7	398196-54-8	398196-55-9	398196-56-0	398196-57-1
	398196-58-2	398196-59-3	398196-60-6	398196-61-7	398196-62-8
	398196-63-9	398196-64-0	398196-65-1	398196-66-2	398196-67-3
	398196-68-4	398196-69-5			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)

IT	398196-70-8	398196-71-9	398196-72-0	398196-73-1	398196-74-2
	398196-75-3	398196-76-4	398196-77-5	398196-78-6	398196-79-7
	398196-80-0	398196-81-1	398196-82-2	398196-83-3	398196-84-4
	398196-85-5	398196-86-6	398196-87-7	398196-88-8	398196-89-9
	398196-90-2	398196-91-3	398196-92-4	398196-93-5	398196-94-6
	398196-95-7	398196-96-8	398196-97-9	398196-98-0	398196-99-1
	398197-00-7	398197-01-8	398197-02-9	398197-03-0	398197-04-1
	398197-05-2	398197-06-3	398197-07-4	398197-08-5	398197-09-6
	398197-10-9	398197-11-0	398197-12-1	398197-13-2	398197-14-3
	398197-15-4	398197-16-5	398197-17-6	398197-18-7	398197-19-8
	398197-20-1	398197-21-2	398197-22-3	398197-23-4	398197-24-5

398197-25-6	398197-26-7	398197-27-8	398197-28-9	398197-29-0
398197-30-3	398197-31-4	398197-32-5	398197-33-6	398197-34-7
398197-35-8	398197-36-9	398197-37-0	398197-38-1	398197-39-2
398197-40-5	398197-41-6	398197-42-7	398197-43-8	398197-44-9
398197-45-0	398197-46-1	398197-47-2	398197-48-3	398197-49-4
398197-50-7	398197-51-8	398197-52-9	398197-53-0	398197-54-1
398197-55-2	398197-56-3	398197-57-4	398197-58-5	398197-59-6
398197-60-9	398197-61-0	398197-62-1	398197-63-2	398197-64-3
398197-65-4	398197-66-5	398197-67-6	398197-68-7	398197-69-8
398197-70-1	398197-71-2	398197-72-3	398197-73-4	398197-74-5
398197-75-6	398197-76-7	398197-77-8	398197-78-9	398197-79-0
398197-80-3	398197-81-4	398197-82-5	398197-83-6	398197-84-7
398197-85-8	398197-86-9	398197-87-0	398197-88-1	398197-89-2
398197-90-5	398197-91-6	398197-92-7	398197-93-8	398197-94-9
398197-95-0	398197-96-1	398197-97-2	398197-98-3	398197-99-4
398198-00-0	398198-01-1	398198-02-2	398198-03-3	398198-04-4
400616-76-4	400616-77-5	400616-78-6	400616-80-0	400616-81-1
400616-82-2	400616-84-4	400616-85-5	400616-86-6	400616-87-7
400616-88-8	400616-89-9	400616-90-2	400616-91-3	400616-92-4
400616-93-5	400616-94-6	400616-95-7	400616-96-8	400616-97-9
400616-98-0	400616-99-1	400617-00-7	400617-01-8	400617-02-9
400617-03-0	400617-04-1	400617-05-2	400617-06-3	400617-07-4
400617-08-5	400617-09-6	400617-10-9	400617-11-0	400617-12-1
400617-13-2	400617-14-3	400617-15-4	400617-16-5	400617-17-6
400617-18-7	400617-19-8	400617-20-1	400617-21-2	400617-22-3
400617-23-4	400617-24-5	400617-25-6	400617-26-7	400617-27-8
400617-28-9	400617-29-0	400617-30-3	400617-31-4	400617-32-5
400617-33-6	400617-34-7	400617-35-8	400617-36-9	400617-37-0
400617-38-1	400617-39-2	400617-40-5	400617-41-6	400617-42-7
400617-43-8	400617-44-9	400617-45-0	400617-46-1	400617-47-2
400617-48-3	400617-49-4	400617-50-7	400617-51-8	400617-53-0
400617-54-1	400617-55-2	400617-56-3	400617-57-4	400617-58-5
400617-59-6	400617-60-9	400617-61-0	400617-62-1	400617-63-2
400617-64-3	400617-65-4	400617-66-5	400617-67-6	400617-68-7
400617-69-8	400617-70-1	400617-71-2	400617-72-3	400617-73-4
400617-74-5	400617-75-6	400617-76-7	400617-77-8	400617-78-9
400617-79-0	400617-80-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	400617-81-4	400617-82-5	400617-83-6	400617-84-7	400617-85-8
	400617-86-9	400617-87-0	400617-88-1	400617-89-2	400617-90-5
	400617-91-6	400617-92-7	400617-93-8	400617-94-9	400617-95-0
	400617-96-1	400617-97-2	400617-98-3	400617-99-4	400618-00-0
	400618-01-1	400618-02-2	400618-03-3	400618-04-4	400618-05-5
	400618-06-6	400618-07-7	400618-08-8	400618-09-9	400618-11-3
	400618-13-5	400618-15-7	400618-17-9	400618-18-0	400618-19-1
	400618-20-4	400618-21-5	400618-22-6	400618-23-7	400618-24-8
	400618-25-9	400618-26-0	400618-27-1	400618-28-2	400618-29-3
	400618-30-6	400618-31-7	400618-32-8	400618-33-9	400618-34-0
	400618-35-1	400618-37-3	400618-38-4	400618-39-5	400618-41-9
	400618-42-0	400618-43-1	400618-44-2	400618-45-3	400618-46-4
	400618-47-5	400618-48-6	400618-49-7	400618-50-0	400618-51-1
	400618-52-2	400618-53-3	400618-54-4	400618-56-6	400618-57-7
	400618-59-9	400618-60-2	400618-61-3	400618-62-4	400618-63-5
	400618-64-6	400618-65-7	400618-66-8	400618-68-0	400618-69-1
	400618-70-4	400618-71-5	400618-72-6	400618-73-7	400618-74-8
	400618-75-9	400618-76-0	400618-77-1	400618-78-2	400618-79-3
	400618-80-6	400618-81-7	400618-82-8	400618-83-9	400618-84-0
	400618-85-1	400618-86-2	400618-87-3	400618-88-4	400618-90-8
	400618-91-9	400618-92-0	400618-93-1	400618-94-2	400618-95-3
	400618-96-4	400618-97-5	400618-98-6	400618-99-7	400619-00-3
	400619-01-4	400619-02-5	400619-03-6	400619-04-7	400619-05-8
	400619-06-9	400619-07-0	400619-09-2	400619-11-6	400619-19-4

400619-20-7	400619-21-8	400619-22-9	400619-23-0	400619-24-1
400619-25-2	400619-26-3	400619-27-4	400619-28-5	400619-29-6
400619-30-9	400619-31-0	400619-32-1	400619-33-2	400619-34-3
400619-35-4	400619-36-5	400619-37-6	400619-38-7	400619-39-8
400619-40-1	400619-41-2	400619-42-3	400619-43-4	400619-44-5
400619-45-6	400619-46-7	400619-47-8	400619-48-9	400619-49-0
400619-51-4	400619-53-6	400619-54-7	400619-55-8	400619-56-9
400619-57-0	400619-59-2	400619-60-5	400619-61-6	400619-62-7
400619-63-8	400619-64-9	400619-65-0	400619-66-1	400619-67-2
400619-68-3	400619-69-4	400619-70-7	400619-71-8	400619-72-9
400619-73-0	400619-74-1	400619-75-2	400619-77-4	400619-78-5
400619-79-6	400619-81-0	400619-82-1	400619-83-2	400619-84-3
400619-85-4	400619-86-5	400619-87-6	400619-88-7	400619-89-8
400619-90-1	400619-91-2	400619-92-3	400619-93-4	400619-94-5
400619-95-6	400619-97-8	400619-98-9	400619-99-0	400620-00-0
400620-01-1	400620-02-2	400620-03-3	400620-04-4	400620-05-5
400620-06-6	400620-07-7	400620-08-8	400620-09-9	400620-10-2
400620-11-3	400620-12-4	400620-13-5	400620-14-6	400620-15-7
400620-16-8	400620-17-9	400620-18-0	400620-19-1	400620-20-4
400620-21-5	400620-22-6	400620-23-7	400620-24-8	400620-26-0
400620-27-1	400620-28-2	400620-29-3	400620-30-6	400620-31-7
400620-32-8	400620-33-9	400620-34-0	400620-35-1	400620-36-2
400620-37-3	400620-38-4	400620-40-8	400620-42-0	400620-43-1
400620-44-2	400620-45-3			

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

IT	400620-46-4	400620-47-5	400620-48-6	400620-49-7	400620-50-0
	400620-52-2	400620-53-3	400620-54-4	400620-55-5	400620-56-6
	400620-58-8	400620-59-9	400620-60-2	400620-62-4	400620-63-5
	400620-65-7	400620-66-8	400620-67-9	400620-68-0	400620-69-1
	400620-70-4	400620-71-5	400620-73-7	400620-75-9	400620-77-1
	400620-80-6	400620-83-9	400620-84-0	400620-85-1	400620-86-2
	400620-90-8	400620-96-4	400620-98-6	400621-00-3	400621-02-5
	400621-04-7	400621-06-9	400621-11-6	400621-12-7	400621-13-8
	400621-14-9	400621-15-0	400621-16-1	400621-17-2	400621-18-3
	400621-19-4	400621-20-7	400621-21-8	400621-22-9	400621-23-0
	400621-24-1	400621-25-2	400621-26-3	400621-27-4	400621-28-5
	400621-34-3	400621-35-4	400621-37-6	400621-38-7	400621-39-8
	400621-40-1	400621-41-2	400621-42-3	400621-43-4	400621-44-5
	400621-45-6	400621-46-7	400621-47-8	400621-48-9	400621-49-0
	400621-50-3	400621-51-4	400621-52-5	400621-53-6	400621-54-7
	400621-55-8	400621-56-9	400621-57-0	400621-58-1	400621-59-2
	400621-60-5	400621-61-6	400621-62-7	400621-64-9	400621-65-0
	400621-66-1	400621-67-2	400621-68-3	400621-71-8	400621-72-9
	400621-73-0	400621-74-1	400621-75-2	400621-76-3	400621-77-4
	400621-78-5	400621-79-6	400621-80-9	400621-81-0	400621-82-1
	400621-83-2	400621-84-3	400621-86-5	400621-87-6	400621-88-7
	400621-90-1	400621-91-2	400621-92-3	400621-94-5	400621-95-6
	400621-96-7	400621-97-8	400621-98-9	400622-00-6	400622-01-7
	400622-04-0	400622-05-1	400622-06-2	400622-08-4	400622-09-5
	400622-12-0	400622-13-1	400622-14-2	400622-15-3	400622-16-4
	400622-17-5	400622-21-1	400622-22-2	400622-25-5	400622-26-6
	400622-27-7	400622-28-8	400622-29-9	400622-30-2	400622-32-4
	400622-33-5	400622-34-6	400622-35-7	400622-36-8	400622-37-9
	400622-38-0	400622-39-1	400622-40-4	400622-41-5	400622-42-6
	400622-43-7	400622-44-8	400622-45-9	400622-47-1	400622-48-2
	400622-49-3	400622-50-6	400622-51-7	400622-56-2	400622-59-5
	400622-62-0	400622-65-3	400622-68-6	400622-71-1	400622-74-4
	400622-76-6	400622-77-7	400622-79-9	400622-80-2	400622-81-3
	400622-82-4	400622-83-5	400622-84-6	400622-85-7	400622-86-8
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
probes useful for anal. of gene expression in human breast and BT 474
cells)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human breast and BT 474 cells)

IT 7440-21-3, Silicon, uses

RL: DEV (Device component use); USES (Uses)
 (spatially addressable substrate; human genome-derived single exon
 nucleic acid probes useful for anal. of gene expression in human breast
 and BT 474 cells)

IT 400778-72-5

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

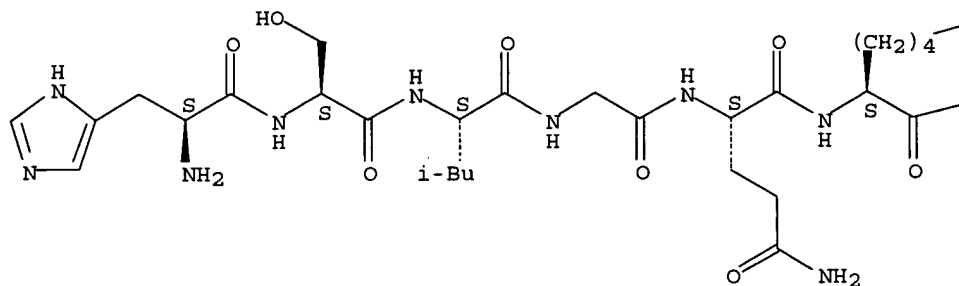
(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474
 cells)

RN 400778-72-5 HCAPLUS

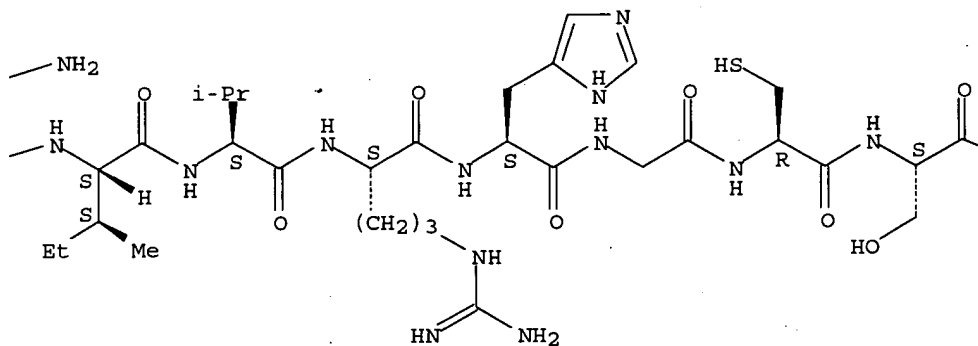
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 asparaginyl-L- α -glutamyl-L-seryl-L-arginyl-L-cysteinyl-L-prolyl-L-
 histidyl-L-threonyl-L-cysteinyl-L-alanyl-L-leucyl-L-cysteinyl-L-arginyl-L-
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Absolute stereochemistry.

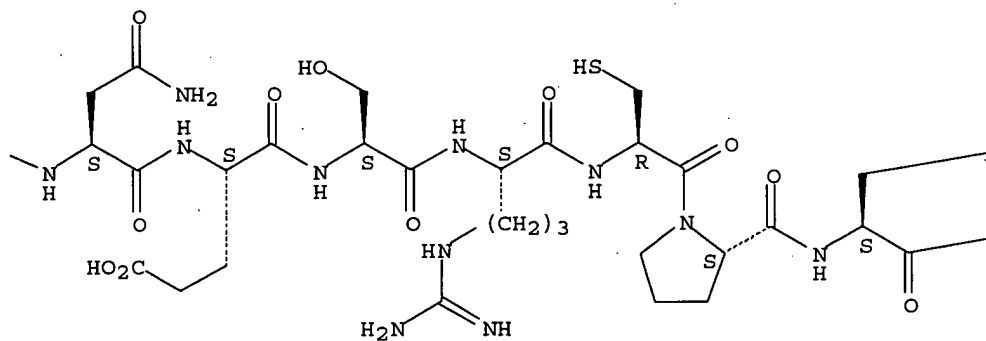
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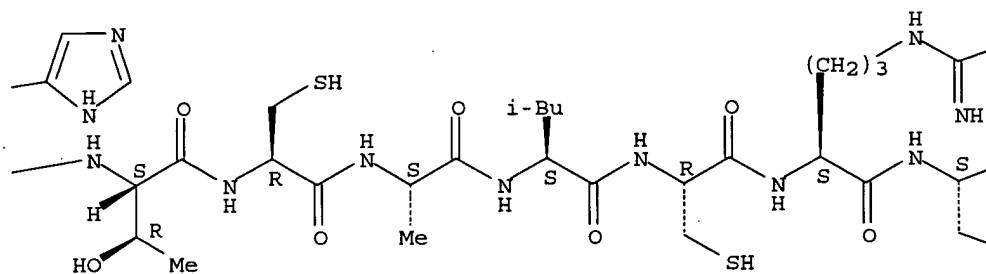
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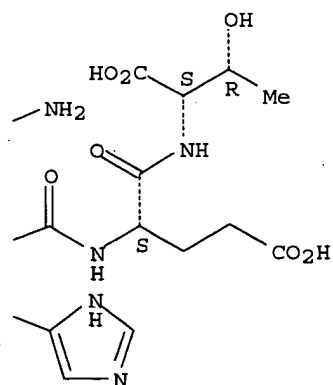
PAGE 1-C



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L24 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:624615 HCAPLUS
 DN 135:328135
 ED Entered STN: 29 Aug 2001
 TI Nucleic acids containing single nucleotide polymorphisms in the human

Search done by Noble Jarrell

genome
 IN Shimkets, Richard A.; Leach, Martin
 PA Curagen Corp., USA
 SO PCT Int. Appl., 4144 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC C07H021-04; C07H021-02; C12Q001-68; C07K014-47; C07K016-18; G01N033-53;
 A61K048-00; A61K039-395; A61K038-00
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 13

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2001047944	A2	20010705	WO 2000-US35498	20001228 <--	
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	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	CA 2395926	AA	20010705	CA 2000-2395926	20001228 <--	
	AU 2001029145	A5	20010709	AU 2001-29145	20001228 <--	
	EP 1244688	A1	20021002	EP 2000-993615	20001228 <--	
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PRAI	US 1999-173419P	P	19991228	<--		
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
WO 2001047944	IC	C07H021-04IC	C07H021-02IC	C12Q001-68IC
		C07K014-47IC	C07K016-18IC	G01N033-53IC
		A61K048-00IC	A61K039-395IC	A61K038-00
WO 2001047944	ECLA	C07K014/47		<--

AB The invention provides 7867 nucleic acids containing single-nucleotide polymorphisms (SNPs) identified for transcribed human sequences, as well as methods of using the nucleic acids. The polymorphisms are arranged in the order: 5696 nucleotide sequences for SNPs that are silent; 315 nucleotide sequences for SNPs that lead to conservative amino acid changes; 729 nucleotide changes for SNPs that lead to nonconservative amino acid changes; and 1127 nucleotide sequences for SNPs that involve a gap. The polymorphisms may be detected using allele-specific oligonucleotides that hybridize to the polymorphic site, and have applications in forensic analyses and disease diagnosis. [This abstract record is the second of 2 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ST single nucleotide polymorphism sequence human genome

IT Nucleic acid hybridization
 (allele-specific oligonucleotides for; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT Probes (nucleic acid)
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (allele-specific; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT Diagnosis
 (genetic; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT DNA microarray technology
 DNA sequences

Forensic analysis

Immunoassay

Protein sequences

(nucleic acids containing single nucleotide polymorphisms in the human genome)

IT DNA

RNA

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(nucleic acids containing single nucleotide polymorphisms in the human genome)

IT Antibodies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(nucleic acids containing single nucleotide polymorphisms in the human genome)

IT Genetic polymorphism

(single nucleotide; nucleic acids containing single nucleotide polymorphisms in the human genome)

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	364320-37-6	364320-38-7	364320-39-8	364320-40-1	364320-41-2
	364320-42-3	364320-43-4	364320-44-5	364320-45-6	364320-46-7
	364320-51-4	364320-52-5	364320-53-6	364320-54-7	364320-58-1
	364320-59-2	364320-60-5	364320-61-6	364320-62-7	364320-63-8
	364320-64-9	364320-65-0	364320-66-1	364320-67-2	364320-68-3
	364320-69-4	364320-70-7	364320-71-8	364320-72-9	364320-73-0
	364320-81-0	364320-82-1	364320-83-2	364320-85-4	364320-86-5
	364320-87-6	364320-88-7	364320-90-1	364320-91-2	364320-92-3
	364320-93-4	364320-94-5	364320-95-6	364320-96-7	364320-97-8
	364320-98-9	364320-99-0	364321-00-6	364321-01-7	364321-03-9
	364321-12-0	364321-13-1	364321-14-2	364321-15-3	364321-16-4
	364321-17-5	364321-18-6	364321-19-7	364321-20-0	364321-21-1
	364321-22-2	364321-23-3	364321-24-4	364321-25-5	364321-26-6
	364321-27-7	364321-28-8	364321-29-9	364321-30-2	364321-34-6
	364321-36-8	364321-38-0	364321-39-1	364321-40-4	364321-60-8
	364322-05-4	364322-40-7	364322-75-8	364323-03-5	364323-44-4

364323-70-6 364323-94-4 364324-21-0 364324-35-6 364324-39-0
364324-40-3

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	364324-42-5	364324-43-6	364324-44-7	364324-45-8	364324-50-5
	364324-51-6	364324-52-7	364324-53-8	364324-54-9	364324-55-0
	364324-56-1	364324-57-2	364324-58-3	364324-59-4	364324-86-7
	364324-87-8	364324-89-0	364324-90-3	364324-91-4	364324-92-5
	364324-93-6	364324-96-9	364324-97-0	364325-06-4	364325-07-5
	364325-10-0	364325-11-1	364325-12-2	364325-14-4	364325-15-5
	364325-16-6	364325-17-7	364325-18-8	364325-19-9	364325-20-2
	364325-21-3	364325-22-4	364325-23-5	364325-24-6	364325-25-7
	364325-26-8	364325-27-9	364325-28-0	364325-29-1	364325-30-4
	364325-40-6	364325-48-4	364325-49-5	364325-50-8	364325-52-0
	364325-53-1	364325-54-2	364325-55-3	364326-37-4	364326-38-5
	364326-39-6	364326-40-9	364326-41-0	364326-65-8	364326-97-6
	364327-28-6	364327-60-6	364327-88-8	364327-96-8	364327-99-1
	364328-06-3	364328-22-3	364328-23-4	364328-24-5	364328-25-6
	364328-26-7	364328-27-8	364328-29-0	364328-30-3	364328-31-4
	364328-32-5	364328-48-3	364328-49-4	364328-50-7	364328-51-8
	364328-52-9	364328-53-0	364328-61-0	364328-62-1	364328-63-2
	364328-67-6	364328-79-0	364328-80-3	364328-81-4	364328-82-5
	364328-83-6	364328-84-7	364328-85-8	364329-13-5	364329-14-6
	364330-56-3	364330-60-9	364330-61-0	364330-62-1	364330-63-2
	364330-64-3	364330-65-4	364330-66-5	364330-67-6	364330-68-7
	364330-69-8	364330-70-1	364330-71-2	364330-72-3	364330-73-4
	364330-74-5	364330-82-5	364330-86-9	364330-89-2	364330-90-5
	364330-91-6	364330-92-7	364330-93-8	364330-94-9	364330-95-0
	364330-97-2	364330-98-3	364331-01-1	364331-02-2	364331-03-3
	364331-04-4	364331-17-9	364331-46-4	364331-87-3	364332-17-2
	364332-45-6	364332-66-1	364332-85-4	364332-92-3	364332-99-0
	364333-00-6	364333-01-7	364333-03-9	364333-04-0	364333-05-1
	364333-06-2	364333-07-3	364333-08-4	364333-20-0	364333-29-9
	364333-51-7	364333-68-6	364333-69-7	364333-70-0	364333-87-9
	364334-97-4	364335-06-8	364335-12-6	364335-13-7	364335-14-8
	364335-15-9	364335-16-0	364335-17-1	364335-18-2	364335-19-3
	364335-21-7	364335-22-8	364335-23-9	364335-24-0	364335-25-1
	364335-27-3	364335-30-8	364335-31-9	364335-34-2	364335-39-7
	364335-40-0	364335-41-1	364335-42-2	364335-43-3	364335-47-7
	364335-48-8	364335-49-9	364335-50-2	364335-51-3	364335-52-4
	364335-53-5	364335-54-6	364335-57-9	364335-59-1	364335-60-4
	364335-61-5	364335-69-3	364335-76-2	364335-77-3	364335-79-5
	364335-80-8	364335-81-9	364335-83-1	364335-84-2	364335-86-4
	364335-87-5	364335-88-6	364335-89-7	364335-90-0	364335-92-2
	364335-93-3	364335-94-4	364335-95-5	364335-96-6	364335-97-7
	364335-98-8	364335-99-9	364336-00-5	364336-01-6	364336-02-7
	364336-26-5	364336-27-6	364336-28-7	364336-29-8	364336-33-4
	364336-42-5	364336-45-8	364336-59-4	364336-61-8	364336-62-9
	364336-63-0	364336-64-1	364336-65-2	364336-66-3	364336-67-4
	364336-68-5	364336-69-6	364336-70-9	364336-71-0	364336-73-2
	364336-84-5				

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	364336-85-6	364336-86-7	364336-87-8	364336-88-9	364336-89-0
	364336-90-3	364336-94-7	364336-97-0	364337-08-6	364337-32-6
	364337-38-2	364337-39-3	364337-40-6	364337-43-9	364337-62-2
	364337-80-4	364339-27-5	364339-31-1	364353-76-4	364353-77-5
	364353-79-7	364353-80-0	364353-81-1	364353-82-2	364353-83-3

364353-85-5	364353-86-6	364353-87-7	364353-88-8	364354-10-9
364354-22-3	364354-31-4	364354-49-4	364354-58-5	364354-67-6
364354-76-7	364354-77-8	364354-78-9	364354-82-5	364354-87-0
364354-93-8	364355-17-9	364355-37-3	364355-45-3	364355-54-4
364355-69-1	364355-74-8	364355-95-3	364356-04-7	364356-76-3
364356-80-9	364356-83-2	364356-86-5	364356-89-8	364356-91-2
364356-94-5	364356-96-7	364356-97-8	364356-99-0	364357-01-7
364357-03-9	364357-09-5	364357-12-0	364357-14-2	364357-44-8
364357-47-1	364357-49-3	364357-53-9	364357-64-2	364357-66-4
364357-68-6	364357-71-1	364357-76-6	364357-84-6	364358-33-8
364358-35-0	364358-37-2	364358-39-4	364358-41-8	364358-44-1
364358-46-3	364358-48-5	364358-50-9	364358-53-2	364358-57-6
364358-60-1	364358-63-4	364358-66-7	364358-69-0	364358-73-6
364358-74-7	364358-75-8	364358-77-0	364358-79-2	364358-81-6
364358-92-9	364358-93-0	364358-94-1	364358-97-4	364359-07-9
364359-19-3	364359-20-6	364359-21-7	364359-25-1	364359-26-2
364359-27-3	364359-28-4	364359-30-8	364359-31-9	364359-32-0
364359-33-1	364359-34-2	364359-36-4	364359-38-6	364359-41-1
364359-43-3	364359-45-5	364359-47-7	364361-12-6	364361-15-9
364361-16-0	364361-17-1	364361-19-3	364361-22-8	364361-23-9
364361-25-1	364361-26-2	364361-27-3	364361-29-5	364361-55-7
364361-56-8	364361-62-6	364361-69-3	364361-77-3	364361-93-3
364361-94-4	364362-01-6	364362-11-8	364362-13-0	364362-15-2
364362-17-4	364362-25-4	364362-39-0	364362-50-5	364362-52-7
364362-55-0	364362-81-2	364363-21-3	364363-28-0	364363-46-2
364363-63-3	364363-82-6	364364-01-2	364364-02-3	364364-04-5
364364-16-9	364364-26-1	364364-44-3	364364-45-4	364364-48-7
364364-57-8	364364-64-7	364364-65-8	364364-67-0	364364-69-2
364364-75-0	364364-83-0	364375-37-1	364375-38-2	364375-39-3
364375-40-6	364375-41-7	364375-42-8	364375-43-9	364375-44-0
364375-45-1	364375-46-2	364375-47-3	364375-48-4	364375-49-5
364375-50-8	364375-51-9	364375-52-0	364375-53-1	364375-54-2
364375-56-4	364375-57-5	364375-58-6	364375-63-3	364375-64-4
364375-65-5	364375-74-6	364375-83-7	364375-84-8	364375-88-2
364375-89-3	364375-90-6	364375-93-9	364375-96-2	364375-97-3
364375-98-4	364375-99-5	364376-09-0	364376-11-4	364376-12-5
364376-19-2	364376-24-9	364376-28-3	364376-33-0	364376-34-1
364376-35-2	364376-37-4	364376-38-5	364376-51-2	364376-52-3
364376-53-4	364376-54-5	364376-74-9	364376-77-2	364376-85-2
364376-86-3	364376-87-4	364377-04-8	364377-05-9	364377-06-0
364377-07-1	364377-11-7	364377-12-8	364377-13-9	364377-14-0
364377-15-1				

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	364377-16-2	364377-17-3	364377-59-3	364377-78-6	364377-88-8
	364378-24-5	364378-26-7	364378-27-8	364378-30-3	364378-32-5
	364378-33-6	364378-34-7	364378-35-8	364378-36-9	364378-42-7
	364378-54-1	364378-55-2	364378-56-3	364378-57-4	364378-58-5
	364378-59-6	364378-60-9	364378-61-0	364378-62-1	364378-63-2
	364378-64-3	364378-65-4	364378-67-6	364378-68-7	364378-77-8
	364378-78-9	364378-79-0	364378-80-3	364378-81-4	364378-82-5
	364378-83-6	364378-84-7	364378-85-8	364378-86-9	364378-87-0
	364379-05-5	364379-22-6	364379-36-2	364379-37-3	
	364379-38-4	364379-39-5	364379-40-8	364379-41-9	364379-42-0
	364379-43-1	364379-44-2	364379-45-3	364379-46-4	364379-47-5
	364379-48-6	364379-49-7	364379-50-0	364379-51-1	364379-52-2
	364379-53-3	364379-63-5	364379-64-6	364379-65-7	364379-66-8
	364379-67-9	364379-68-0	364379-69-1	364379-70-4	364379-73-7
	364379-76-0	364379-77-1	364379-78-2	364379-79-3	364379-80-6
	364379-81-7	364379-82-8	364379-83-9	364379-92-0	364380-00-7
	364380-01-8	364380-02-9	364380-06-3	364380-07-4	364380-08-5
	364380-10-9	364380-11-0	364380-12-1	364380-13-2	364380-14-3

364380-15-4	364380-16-5	364380-17-6	364380-20-1	364380-24-5
364380-25-6	364380-26-7	364380-27-8	364380-35-8	364380-36-9
364380-37-0	364380-38-1	364380-39-2	364380-40-5	364380-41-6
364380-42-7	364380-43-8	364380-45-0	364380-46-1	364380-47-2
364380-48-3	364380-49-4	364380-50-7	364380-53-0	364380-54-1
364380-57-4	364380-62-1	364380-68-7	364380-75-6	364380-83-6
364380-92-7	364381-02-2	364381-18-0	364381-25-9	364381-37-3
364381-43-1	364381-61-3	364381-90-8	364382-16-1	364382-39-8
364382-57-0	364382-70-7	364382-79-6	364382-89-8	364382-99-0
364383-08-4	364383-17-5	364383-27-7	364383-34-6	364383-44-8
364383-58-4	364383-61-9	364383-68-6	364383-76-6	364383-84-6
364383-92-6	364384-04-3	364384-09-8	364384-17-8	364384-26-9
364384-32-7	364384-39-4	364384-51-0	364384-83-8	364384-92-9
364384-93-0	364384-94-1	364384-95-2	364384-96-3	364384-97-4
364384-98-5	364384-99-6	364385-00-2	364385-01-3	364385-02-4
364385-03-5	364385-04-6	364385-05-7	364385-06-8	364385-07-9
364385-08-0	364385-09-1	364385-10-4	364385-11-5	364385-12-6
364385-13-7	364385-14-8	364385-15-9	364385-16-0	364385-17-1
364385-18-2	364385-19-3	364385-26-2	364385-27-3	364385-28-4
366472-43-7	366473-01-0	366473-26-9	366474-74-0	366475-00-5
366475-21-0	366475-50-5	366475-69-6	366475-93-6	366476-52-0
366476-53-1	366476-54-2	366476-55-3	366476-56-4	366476-57-5
366476-61-1	366476-64-4	366476-65-5	366476-67-7	366476-69-9
366476-71-3	366476-72-4	366476-75-7	366476-76-8	366476-78-0
366476-79-1	366476-80-4	366476-81-5	366476-82-6	366476-83-7
366476-91-7	366476-92-8	366476-94-0	366476-95-1	366476-96-2
366476-98-4	366476-99-5	366477-02-3	366477-03-4	366477-04-5
366477-05-6	366477-06-7	366477-07-8	366477-08-9	366477-09-0
366477-10-3	366477-11-4			

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	366477-12-5	366477-13-6	366477-23-8	366477-24-9	366477-25-0
	366477-26-1	366477-27-2	366477-28-3	366477-29-4	366477-30-7
	366477-31-8	366477-32-9	366477-37-4	366477-38-5	366477-40-9
	366477-41-0	366477-42-1	366477-43-2	366477-45-4	366477-46-5
	366477-47-6	366477-48-7	366477-49-8	366477-50-1	366477-51-2
	366477-55-6	366477-58-9	366477-59-0	366477-60-3	366479-15-4
	366479-16-5	366479-18-7	366479-19-8	366479-20-1	366479-21-2
	366479-22-3	366479-23-4	366479-24-5	366479-25-6	366479-26-7
	366479-46-1	366479-60-9	366479-70-1	366479-71-2	366479-72-3
	366479-83-6	366480-00-4	366480-01-5	366480-02-6	366480-03-7
	366480-04-8	366480-05-9	366480-07-1	366480-08-2	366480-10-6
	366480-11-7	366480-12-8	366480-13-9	366480-14-0	366480-15-1
	366480-16-2	366480-17-3	366480-18-4	366480-39-9	366480-72-0
	366480-97-9	366481-21-2	366481-58-5	366481-76-7	366481-93-8
	366482-03-3	366482-04-4	366482-17-9	366482-18-0	366482-19-1
	366482-20-4	366482-22-6	366482-23-7	366482-24-8	366482-25-9
	366482-26-0	366482-28-2	366482-29-3	366482-30-6	366482-37-3
	366482-43-1	366482-44-2	366482-45-3	366482-46-4	366482-48-6
	366482-62-4	366482-63-5	366482-64-6	366482-65-7	366482-67-9
	366482-68-0	366482-69-1	366482-70-4	366482-71-5	366482-72-6
	366482-87-3	366483-04-7	366487-71-0	366489-07-8	366489-13-6
	366489-21-6	366489-22-7	366489-23-8	366489-24-9	366489-26-1
	366489-28-3	366489-29-4	366489-30-7	366489-31-8	366489-32-9
	366489-34-1	366489-36-3	366489-38-5	366489-85-2	366489-87-4
	366489-88-5	366489-89-6	366489-90-9	366489-93-2	366489-94-3
	366489-95-4	366489-97-6	366489-98-7	366489-99-8	366490-00-8
	366490-01-9	366490-02-0	366490-03-1	366490-06-4	366490-07-5
	366490-14-4	366490-15-5	366490-17-7	366490-26-8	366490-27-9
	366490-28-0	366490-29-1	366490-30-4	366490-31-5	366490-32-6
	366490-33-7	366490-34-8	366490-37-1	366490-43-9	366490-44-0
	366490-45-1	366490-46-2	366490-47-3	366490-55-3	366490-56-4

366490-64-4	366490-66-6	366490-67-7	366490-68-8	366490-69-9
366490-70-2	366490-71-3	366490-72-4	366490-73-5	366490-74-6
366490-75-7	366490-76-8	366490-77-9	366490-80-4	366490-81-5
366490-84-8	366490-85-9	366490-86-0	366490-88-2	366490-89-3
366490-90-6	366490-91-7	366490-93-9	366490-95-1	366491-00-1
366491-02-3	366491-07-8	366491-08-9	366491-09-0	366491-10-3
366491-11-4	366491-12-5	366491-23-8	366491-24-9	366491-25-0
366491-26-1	366491-27-2	366491-28-3	366491-30-7	366491-31-8
366491-32-9	366783-97-3	366783-98-4	366783-99-5	366784-00-1
366784-01-2	366784-04-5	366784-13-6	366784-15-8	366784-36-3
366784-37-4	366784-38-5	366784-39-6	366784-41-0	366784-42-1
366784-43-2	366784-44-3	366784-45-4	366784-46-5	366785-27-5
366785-29-7	366785-30-0	366785-31-1	366785-32-2	366785-33-3
366785-36-6	366785-45-7	366785-57-1	366785-60-6	366785-61-7
366785-62-8	366785-63-9	366785-64-0	366785-80-0	366785-81-1
366785-91-3				

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	366785-92-4	366785-93-5	366785-94-6	366785-95-7	366785-96-8
	366785-97-9	366785-98-0	366785-99-1	366786-00-7	366786-01-8
	366786-04-1	366786-05-2	366786-06-3	366786-07-4	366786-08-5
	366786-09-6	366786-10-9	366786-11-0	366786-12-1	366786-20-1
	366786-21-2	366786-22-3	366786-23-4	366786-24-5	366786-25-6
	366786-26-7	366786-28-9	366786-29-0	366786-30-3	366786-38-1
	366786-39-2	366786-40-5	366786-41-6	366786-43-8	366786-45-0
	366786-47-2	366786-48-3	366786-49-4	366786-50-7	366786-51-8
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	366786-58-5	366786-59-6	366786-72-3	366786-77-8	366786-88-1
	366787-08-8	366787-26-0	366787-44-2	366787-57-7	366787-59-9
	366788-19-4	366788-50-3	366788-51-4	366788-64-9	366788-67-2
	366788-70-7	366788-74-1	366788-77-4	366788-78-5	366788-84-3
	366788-85-4	366788-86-5	366788-87-6	366788-88-7	366788-89-8
	366788-90-1	366788-91-2	366788-92-3	366788-98-9	366788-99-0
	366789-01-7	366789-03-9	366789-04-0	366789-05-1	366789-06-2
	366789-07-3	366789-09-5	366789-18-6	366789-20-0	366789-23-3
	366789-25-5	366789-26-6	366789-28-8	366789-31-3	366789-32-4
	366789-33-5	366789-34-6	366789-35-7	366789-40-4	366789-41-5
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	366789-47-1	366789-48-2	366789-49-3	366789-51-7	366789-56-2
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	366789-79-9	366789-80-2	366789-82-4	366789-84-6	366789-85-7
	366789-91-5	366789-92-6	366789-93-7	366789-94-8	366789-96-0
	366789-97-1	366789-98-2	366789-99-3	366790-02-5	366790-04-7
	366790-05-8	366790-06-9	366790-08-1	366790-17-2	366790-43-4
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	366791-01-7	366791-02-8	366791-03-9	366791-04-0	366791-05-1
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 367524-63-8

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	367524-64-9	367524-65-0	367524-66-1	367524-67-2	367524-68-3
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	367524-95-6	367524-96-7	367524-97-8	367524-98-9	367524-99-0
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	367525-05-1	367525-06-2	367525-07-3	367525-08-4	367525-09-5
	367525-10-8	367525-11-9	367525-12-0	367525-13-1	367525-14-2
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	367525-20-0	367525-21-1	367525-22-2	367525-23-3	367525-24-4
	367525-25-5	367525-26-6	367525-27-7	367525-28-8	367525-29-9
	367525-30-2	367525-32-4	367525-33-5	367525-34-6	367525-35-7
	367525-36-8	367525-37-9	367525-38-0	367525-39-1	367525-40-4
	367525-41-5	367525-42-6	367525-43-7	367525-44-8	367525-45-9
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	367525-54-0	367525-60-8	367525-64-2	367525-75-5	369366-43-8
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	369366-93-8	369366-94-9	369366-95-0	369366-96-1	369366-97-2
	369366-98-3	369367-21-5	369367-22-6	369367-23-7	369367-24-8
	369367-25-9	369367-26-0	369367-27-1	369367-28-2	369367-35-1
	369367-36-2	369367-37-3	369367-39-5	369367-43-1	369367-68-0
	369367-96-4	369368-23-0	369368-48-9	369368-59-2	369368-61-6
	369368-62-7	369368-63-8	369368-64-9	369368-65-0	369368-66-1
	369368-69-4	369368-70-7	369368-71-8	369368-72-9	369368-73-0
	369368-74-1	369368-75-2	369368-76-3	369368-77-4	369368-78-5
	369368-80-9	369368-81-0	369368-90-1	369368-97-8	369368-98-9
	369368-99-0	369369-00-6	369369-10-8	369369-29-9	369369-43-7
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	369369-89-1	369369-90-4	369369-91-5	369369-92-6	369369-93-7
	369369-94-8	369369-95-9	369369-96-0	369369-97-1	369369-98-2
	369369-99-3	369370-00-3	369370-01-4	369370-02-5	369370-05-8
	369370-19-4	369370-33-2	369370-44-5	369370-45-6	369370-46-7
	369370-47-8	369370-48-9	369370-49-0	369370-50-3	369370-51-4
	369370-52-5	369371-79-9	369371-80-2	369371-81-3	369371-83-5
	369371-87-9	369371-93-7	369371-95-9	369371-96-0	369371-97-1
	369371-98-2	369371-99-3	369372-00-9	369372-01-0	369372-02-1
	369372-05-4	369372-06-5	369372-07-6	369372-08-7	369372-09-8
	369372-15-6	369372-16-7	369372-17-8	369372-18-9	369372-19-0
	369372-20-3	369372-21-4	369372-22-5	369372-23-6	369372-24-7
	369372-25-8	369372-26-9	369372-33-8	369372-46-3	369372-49-6
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	369372-55-4	369372-56-5	369372-57-6	369372-58-7	369372-59-8
	369372-60-1	369372-61-2	369372-62-3	369372-63-4	369372-64-5
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RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

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	369372-95-2	369372-98-5	369373-00-2	369373-01-3	369373-02-4

369373-03-5	369373-04-6	369373-06-8	369373-10-4	369373-11-5
369373-12-6	369373-13-7	369373-14-8	369373-15-9	369373-16-0
369373-17-1	369373-18-2	369373-19-3	369373-20-6	369373-21-7
369373-41-1	369373-49-9	369373-50-2	369373-51-3	369373-52-4
369373-56-8	369373-64-8	369373-65-9	369373-66-0	369373-67-1
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369373-80-8	369373-81-9	369373-82-0	369373-83-1	369373-85-3
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369374-05-0	369374-06-1	369374-07-2	369374-08-3	369374-09-4
369374-12-9	369374-13-0	369374-14-1	369374-15-2	369374-16-3
369374-17-4	369374-18-5	369374-19-6	369374-20-9	369374-21-0
369374-22-1	369374-23-2	369374-24-3	369374-25-4	369374-29-8
369374-30-1	369374-32-3	369374-33-4	369374-37-8	369374-38-9
369374-39-0	369374-40-3	369374-41-4	369374-42-5	369374-43-6
369374-44-7	369374-45-8	369374-46-9	369374-48-1	369374-49-2
369374-50-5	369374-51-6	369374-52-7	369374-53-8	369374-54-9
369374-55-0	369374-56-1	369374-57-2	369374-58-3	369374-59-4
369374-60-7	369374-62-9	369374-68-5	369374-75-4	369374-77-6
369374-78-7	369374-80-1	369374-81-2	369374-82-3	369374-84-5
369374-85-6	369374-87-8	369374-89-0	369374-92-5	369374-94-7
369374-96-9	369374-98-1	369374-99-2	369375-00-8	369375-01-9
369375-02-0	369375-03-1	369375-05-3	369375-06-4	369375-07-5
369375-18-8	369375-19-9	369375-21-3	369375-28-0	369375-29-1
369375-30-4	369375-31-5	369375-33-7	369375-34-8	369375-35-9
369375-37-1	369375-38-2	369375-41-7	369375-42-8	369375-43-9
369375-44-0	369375-45-1	369375-46-2	369375-50-8	369375-57-5
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369376-16-9	369376-17-0	369376-18-1	369376-19-2	369376-33-0
369376-35-2	369376-36-3	369376-37-4	369376-38-5	369376-43-2
369376-45-4	369376-46-5	369376-47-6	369376-49-8	369376-59-0
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369376-77-2	369376-82-9	369376-83-0	369376-84-1	369376-87-4
369376-88-5	369376-89-6	369376-92-1	369376-93-2	369376-94-3
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369377-07-1	369377-08-2	369377-09-3	369377-16-2	369377-18-4
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369377-36-6				

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT	369377-37-7	369377-47-9	369377-55-9	369377-67-3	369377-68-4
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	369377-78-6	369377-80-0	369377-83-3	369377-85-5	369377-86-6
	369377-95-7	369378-09-6	369378-12-1	369378-13-2	369378-15-4
	369378-19-8	369378-20-1	369378-21-2	369378-22-3	369378-30-3
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	369378-43-8	369378-46-1	369378-51-8	369378-53-0	369378-54-1
	369378-55-2	369378-59-6	369378-61-0	369378-62-1	369378-64-3
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	369378-82-5	369378-83-6	369378-84-7	369378-85-8	369378-86-9
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	369379-20-4	369379-23-7	369379-25-9	369379-26-0	369379-27-1
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	369379-90-8	369379-91-9	369380-26-7	369380-36-9	369380-44-9

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369380-76-7	369380-77-8	369380-78-9	369380-80-3	369380-81-4
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369381-09-9	369381-23-7	369381-24-8	369381-25-9	369381-26-0
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369383-10-8	369383-11-9	369383-12-0	369383-13-1	369383-17-5
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369383-30-2	369383-31-3	369383-32-4	369383-33-5	369383-34-6
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RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

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	369585-33-1	369585-34-2	369585-35-3	369585-36-4	369585-37-5
	369585-38-6	369585-39-7	369585-40-0	369585-41-1	369585-42-2
	369585-43-3	369585-44-4	369585-45-5	369585-47-7	369585-57-9
	369586-01-6	369586-08-3	369586-12-9	369586-15-2	369595-27-7

RL: PRP (Properties)

(unclaimed sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

IT 364379-05-5

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

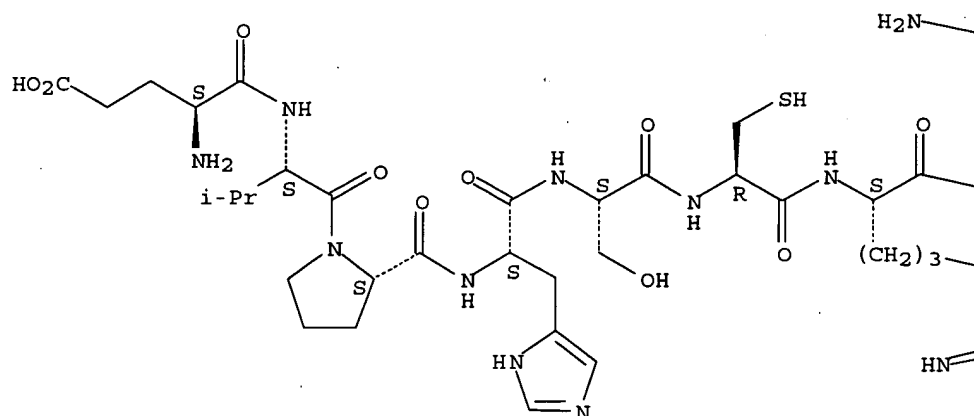
(polymorphic site sequence; nucleic acids containing single nucleotide polymorphisms in the human genome)

RN 364379-05-5 HCAPLUS

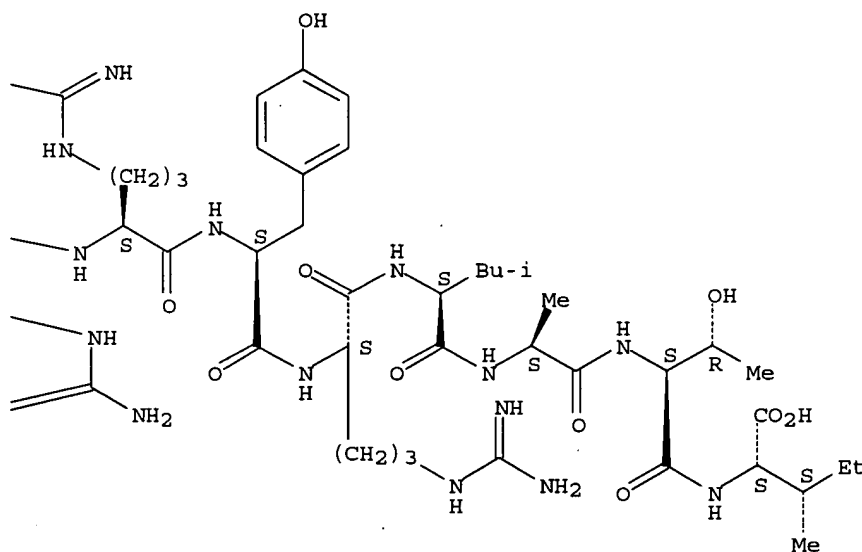
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:472525 HCAPLUS
 DN 135:66204
 ED Entered STN: 29 Jun 2001
 TI A reversible linkage technology for controlled conjugation
 IN Flinn, Nicholas; Johnson, Tony
 PA Acambis Research Ltd., UK; Smithkline Beecham Biologicals SA
 SO PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K047-48
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 15

Search done by Noble Jarrell

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001045745	A2	20010628	WO 2000-GB4935	20001221 <--
	WO 2001045745	A3	20020510		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
PRAI	GB 1999-30233	A	19991221 <--		
	GB 2000-4096	A	20000222 <--		
	GB 2000-20707	A	20000822 <--		
	GB 2000-20708	A	20000822 <--		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2001045745	ICM	A61K047-48
	WO 2001045745	ECLA	A61K047/48R2V; A61K047/48R2L <--
OS	MARPAT 135:66204		
AB	The present invention describes a linkage for use in the conjugation of compds. (e.g. peptides) to carrier vehicles (e.g. macromols., polymers, dendrimers, proteins etc.), producing constructs of biol. and immunol. relevance. The ability to link an Epitope (such as a peptide) to a carrier (such as a protein) in a controlled and specific manner is of a paramount importance in the development of a potent, pharmaceutically relevant, immunogenic hapten-carrier construct, such as a vaccine. The invention provides a reversible linkage technol. for controlled conjugation of compds. such as peptides or peptidic Epitopes to carriers such as proteins. It utilizes an aryl aldehyde moiety to introduce an aldehyde functionality on to a carrier mol. (e.g. on to the surface of a protein carrier mol.). It uses a 2-hydroxy-4-alkoxy linker based on an aryl aldehyde to provide protection in the conjugation of a peptide to a carrier, by virtue of imine formation.		
ST	vaccine epitope reversible linker aldehyde peptide		
IT	Proteins, specific or class		
	RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)		
	(D; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Immunoglobulins		
	RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)		
	(E, -mediated disease; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Immunostimulants		
	(adjuvants; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Drug delivery systems		
	(carriers; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Peptides, biological studies		
	RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)		
	(cyclic, epitopes; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Toxins		
	RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)		
	(diphtheria; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)		
IT	Proteins, general, biological studies		

- RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(drug carriers; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(epitopes; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Fissurella
(hemocyanin of; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Toxins
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(inactivated bacterial; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Drug delivery systems
(liposomes; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Hemocyanins
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(of keyhole limpet; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Drug delivery systems
Epitopes
Immunostimulants
Molecular cloning
Phage display
Vaccines
(reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Antibodies
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)
(reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Antigens
Tuberculin
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Cattle
(serum albumin of; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Albumins, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(serum; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Toxins
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(tetanus; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Bacteria (Eubacteria)
(toxins of; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
- IT Protein motifs
(translocation domains; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)

IT 7429-90-5D, Aluminum, salts, biological studies 7440-70-2D, Calcium, salts, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (adjuvants; reversible linkage technol. for controlled conjugation of epitopes to drug carriers)

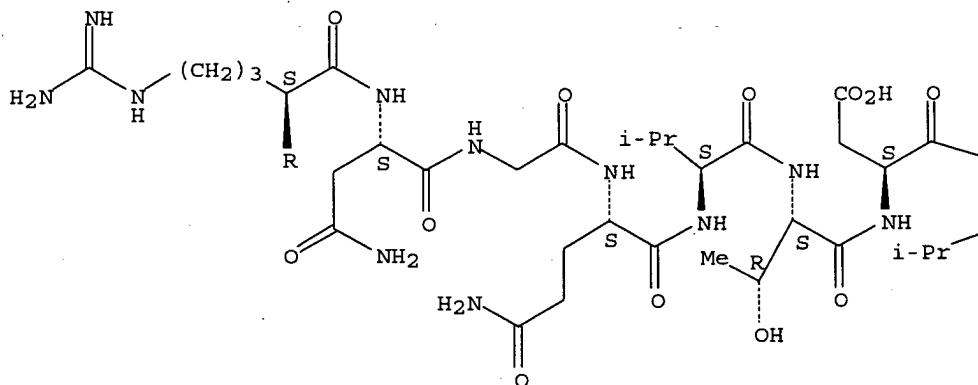
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 RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (reversible linkage technol. for controlled conjugation of epitopes to drug carriers)

IT 346458-14-8 346458-16-0 346458-32-0 346458-34-2 346459-61-8
 346459-63-0 346459-64-1 346459-65-2 346459-66-3 346459-67-4
 346459-68-5 346459-70-9 346459-72-1 346459-75-4 346459-79-8
 346459-81-2 346459-83-4 346459-85-6 346459-87-8 346459-92-5
 346459-94-7 346459-96-9 346459-98-1
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (reversible linkage technol. for controlled conjugation of epitopes to

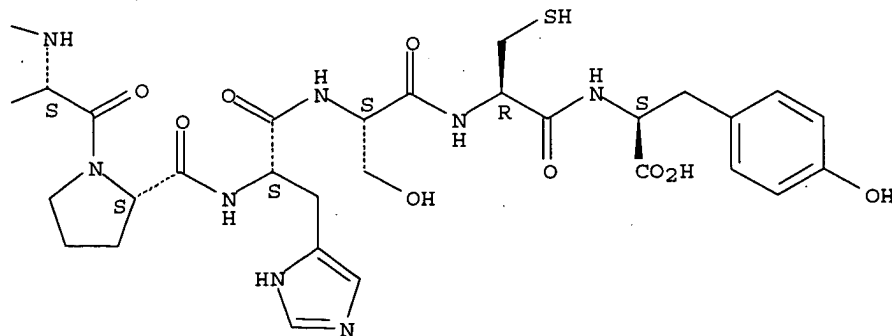
drug carriers)
 IT 6066-82-6 206656-20-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
 IT 346460-13-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
 IT 289886-58-4
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (reversible linkage technol. for controlled conjugation of epitopes to drug carriers)
 RN 289886-58-4 HCAPLUS
 CN L-Tyrosine, L-alanyl-L-cysteinyl-L-phenylalanyl-L-seryl-L-arginyl-L-asparaginylglycyl-L-glutamyl-L-valyl-L-threonyl-L- α -aspartyl-L-valyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

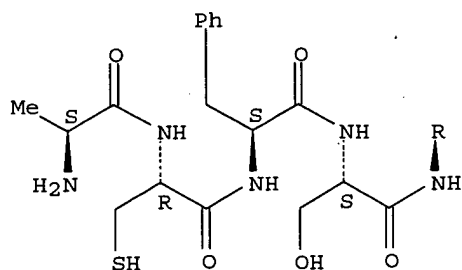
PAGE 1-A



PAGE 1-B



PAGE 2-A



L24 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:185773 HCAPLUS
 DN 134:203478
 ED Entered STN: 16 Mar 2001
 TI Cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins
 IN Ni, Jian; Baker, Kevin P.; Birse, Charles E.; Fiscella, Michele; Komatsoulis, George A.; Rosen, Craig A.; Soppet, Daniel R.; Young, Paul E.; Ebner, Reinhard; Duan, D. Roxanne; Olsen, Henrik S.; Lafleur, David W.; Moore, Paul A.; Shi, Yanggu; Wei, Ying-fei; Florence, Kimberly A.
 PA Human Genome Sciences, Inc., USA; et al.
 SO PCT Int. Appl., 607 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07H021-04
 ICS C07H021-02; C07K005-00; C07K014-00; C12Q001-68; C12N001-12; C12N015-63; C12N015-85; C12N015-86
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6, 13, 63
 FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001018022	A1	20010315	WO 2000-US24008	20000831 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2383800	AA	20010315	CA 2000-2383800	20000831 <--
EP 1212343	A1	20020612	EP 2000-959719	20000831 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508088	T2	20030304	JP 2001-522245	20000831 <--
US 2002064818	A1	20020530	US 2001-789561	20010222 <--
US 2005019866	A1	20050127	US 2004-883936	20040706 <--
PRAI US 1999-152315P	P	19990903	<--	
US 1999-152317P	P	19990903	<--	
WO 2000-US24008	W	20000831	<--	
US 2001-789561	A1	20010222	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001018022	ICM	C07H021-04
	ICS	C07H021-02; C07K005-00; C07K014-00; C12Q001-68; C12N001-12; C12N015-63; C12N015-85; C12N015-86

Search done by Noble Jarrell

WO 2001018022 ECLA C07K014/47 <--
 US 2002064818 NCL 435/069.100; 435/006.000; 435/007.100; 536/023.100;
 435/325.000
 ECLA C07K014/47; C07K014/705B24 <--
 US 2005019866 NCL 435/069.100; 435/320.100; 435/325.000; 530/350.000;
 536/023.500
 ECLA C07K014/47; C07K014/705B24 <--

AB The present invention relates to 52 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.

ST secretory protein cDNA sequence human

IT Animal cell line
 (CHO, recombinant host; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Animal cell line
 (SF9, recombinant host; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Genetic mapping
 (chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Drugs
 Epitopes
 Gene therapy
 Molecular cloning
 (cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Antibodies
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Gene, animal
 RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
 (cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Signal peptides
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
 (cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Diagnosis
 Mutation
 (disease diagnosis by mutation detection; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT cDNA sequences
 (for 52 human secreted proteins)

IT Chromosome
 (human, chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Animal cell
 (mammalian, recombinant host; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Protein sequences
 (of 52 human secreted proteins)

IT Escherichia coli

(recombinant host; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Proteins, specific or class

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(secretory; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT Animal tissue

(tissue distributions; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT 135688-15-2P, Complement C1q (human clone pC1qA8.0E A-chain precursor protein moiety reduced) 227183-97-3P 243122-49-8P 252366-50-0P

252366-55-5P 253418-72-3P 253418-75-6P 259163-79-6P 293308-26-6P

294906-53-9P 300619-65-2P 321452-37-3P 328529-69-7P 328596-84-5P

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328912-59-0P 328912-60-3P 328912-61-4P 328927-55-5P 328927-56-6P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(amino acid sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT 227182-00-5P 252364-02-6P 252364-08-2P 292887-57-1P 300618-46-6P

300619-21-0P 312778-35-1P 312778-81-7P 328596-21-0P 328596-22-1P

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328596-78-7P 328596-79-8P 328596-80-1P 328596-81-2P 328596-82-3P

328596-83-4P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT 229477-44-5 244008-03-5, PN: WO9947540 SEQID: 3 unclaimed DNA

244008-06-8, PN: WO9947540 SEQID: 4 unclaimed DNA 244008-07-9, PN:

WO9947540 SEQID: 5 unclaimed DNA 244008-08-0, PN: WO9947540 SEQID: 6

unclaimed DNA 244008-09-1, PN: WO9947540 SEQID: 7 unclaimed DNA

244008-12-6, 8: PN: WO0183510 SEQID: 8 unclaimed DNA 244008-13-7, PN:

WO9947540 SEQID: 9 unclaimed DNA 244008-14-8, PN: WO9947540 SEQID: 10

unclaimed DNA

RL: PRP (Properties)

(unclaimed nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

IT 328601-74-7 328601-75-8 328601-76-9 328601-79-2 328601-82-7

328601-83-8 328601-84-9 328601-85-0 328601-86-1 328601-87-2

328601-88-3 328601-89-4 328601-90-7 328601-91-8 328601-92-9

RL: PRP (Properties)

IT	328529-70-0	328529-71-1	328529-72-2	328529-73-3	328529-74-4
	328529-75-5	328529-76-6	328529-77-7	328529-78-8	
	328601-77-0	328601-78-1	328601-80-5	328601-81-6	328601-99-6

RL: PRP (Properties)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Agostino; Database GenBank (N_Geneseq_36); Accession NO: V86545 1998
- (2) Hillier; Database GenBank (EST); Accession NO: H08444 1995
- (3) Matsubara; Database GenBank (N_Geneseq_36); Accession NO: T23968 1995
- (4) NCI-CGAP; Database GenBank (EST); Accession NO: AI92802 1999

IT 328529-77-7

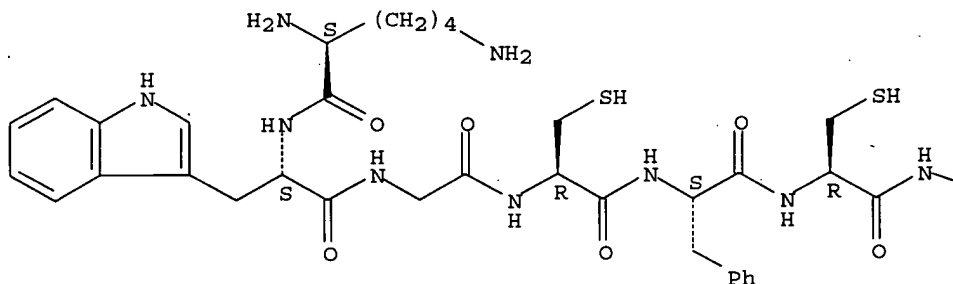
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RN 328529-77-7 HCAPLUS

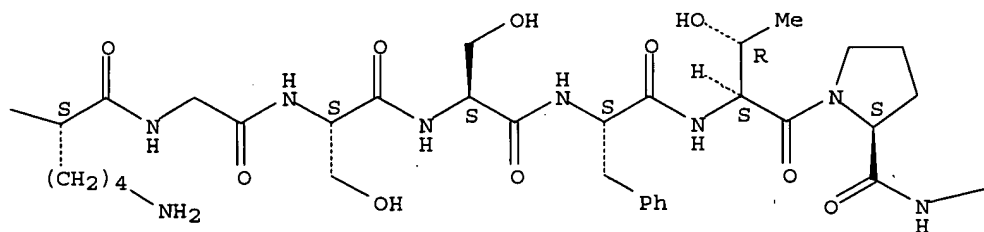
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 histidyl-L-seryl-L-cysteinyl-L-prolyl-L-prolyl-L- α -glutamyl-L-alanyl-
 L-prolyl-L-leucyl-L-phenylalanyl-L-prolyl-L-alanyl-L-valyl-L-leucyl-L-
 leucyl-L-valyl-L-seryl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

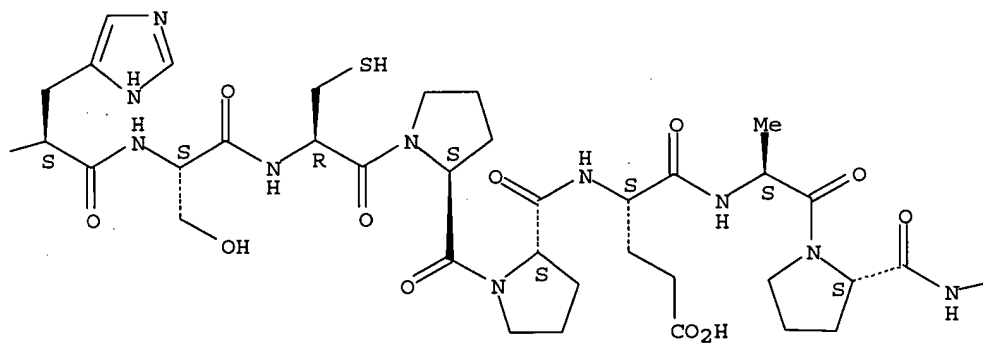
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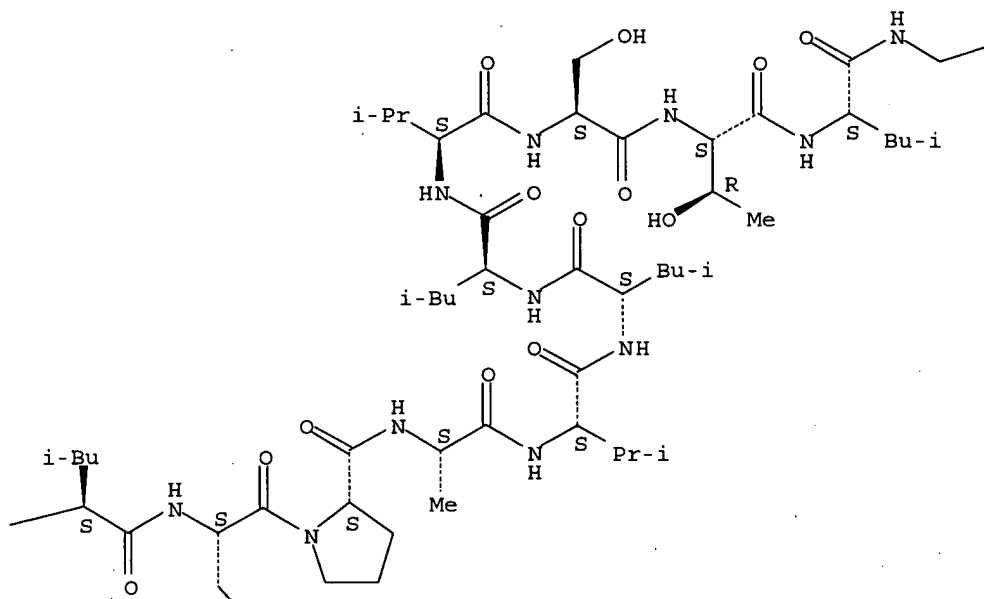
PAGE 1-B



PAGE 1-C



PAGE 1-D



PAGE 1-E

CO₂H

PAGE 2-D

Ph

L24 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:824291 HCAPLUS

DN 134:21425

ED Entered STN: 24 Nov 2000

TI Protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components

IN Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen

PA Conjuchem, Inc., Can.

SO PCT Int. Appl., 733 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K014-00

CC 63-3 (Pharmaceuticals)

Section cross-reference(s): 34

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517 <--
WO 2000069900	A3	20010215		
WO 2000069900	C2	20020704		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

Search done by Noble Jarrell

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
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CA 2373252 AA 20001123 CA 2000-2373252 20000517 <--
 CA 2373680 AA 20001123 CA 2000-2373680 20000517 <--
 WO 2000070665 A2 20001123 WO 2000-IB763 20000517 <--
 WO 2000070665 A3 20010419

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EP 1105409 A2 20010613 EP 2000-936023 20000517 <--
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EP 1171582 A2 20020116 EP 2000-929748 20000517 <--
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EP 1264840 A1 20021211 EP 2002-14617 20000517 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2000069900	ICM	C07K014-00	
WO 2000069900	ECLA	C07K014/16D; C07K014/605	<--
WO 2000070665	ECLA	C07K014/16D	<--
EP 1264840	ECLA	C07K014/16D	<--
US 6849714	NCL	530/335.000; 530/320.000	
	ECLA	C07K001/107D4	<--
US 6514500	NCL	424/193.100; 424/195.110; 514/002.000	
	ECLA	C07K014/605	<--
US 6887470	NCL	424/133.100; 530/378.300; 530/387.100	<--
US 2003108567	NCL	514/002.000; 530/300.000; 530/324.000	

US 2003108568 ECLA C07K014/605 <--
 NCL 424/193.100; 530/399.000; 424/204.100; 530/300.000
 ECLA C07K014/605 <--
 US 2004127398 NCL 514/003.000; 530/303.000
 ECLA C07K014/16D; C07K014/605 <--
 US 2004138100 NCL 514/003.000; 530/303.000
 ECLA C07K014/605 <--

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a blood component. The solid phase peptide synthesis of a number of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH₂) conjugated to human serum albumin via MPA remained relatively constant through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amount of K5 in only 4 h in plasma.

ST therapeutic peptide conjugation blood albumin stability; peptidase stability therapeutic peptide conjugate blood; maleimido conjugation therapeutic peptide peptidase stability

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (CART (cocaine and amphetamine-regulated transcript); protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (apoptosis-regulating; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT Proteins, general, biological studies
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (blood, conjugates; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT Peptides, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (conjugates, therapeutic; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT Fibrinogen degradation products
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (fibrinopeptides; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT Fibronectins
 Laminins
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (fragments; protection of endogenous therapeutic peptides from

- peptidase activity through conjugation to blood components)
- IT Complement
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (inhibitors; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Functional groups
 (maleimido or succinimidyl; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Solid phase synthesis
 (peptide; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Antimicrobial agents
 Antioxidants
 Signal transduction, biological
 (peptides; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Cell adhesion molecules
 Chemotactic factors
 G proteins (guanine nucleotide-binding proteins)
 Gastrointestinal hormones
 Hypothalamic hormones
 Interleukin receptors
 Interleukins
 Osteocalcins
 Pancreatic hormones
 Pituitary hormones
 Tachykinins
 Thyroid hormones
 Toxins
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Albumins, biological studies
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (serum, conjugates; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT Amyloid
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (β-, fragments; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT 124219-00-7
 RL: PRP (Properties)
 (Unclaimed; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT 169494-85-3P, Leptin
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (fragments; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT 9002-04-4P, Thrombin
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (inhibitors; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)
- IT 9031-96-3, Peptidase
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)

(protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 50-56-6P, Oxytocin, biological studies 1393-25-5P, Secretin
1407-47-2P, Angiotensin 9002-60-2P, ACTH, biological studies
9002-64-6P, Parathyroid hormone 9002-72-6P, Growth hormone 9002-76-0P,
Gastrin 9002-79-3P, MSH 9004-10-8P, Insulin, biological studies
9007-12-9P, Calcitonin 9007-92-5P, Glucagon, biological studies
9011-97-6P, Cholecystokinin 9015-71-8P, Corticotropin-releasing factor
9034-39-3P, Growth hormone-releasing factor 9034-40-6P, Luteinizing
hormone-releasing factor 9035-81-8P, Trypsin inhibitor 9088-07-7P,
Natriuretic peptide 11000-17-2P, Vasopressin 24305-27-9P,
Thyrotropin-releasing hormone 31362-50-2P, Bombesin 37221-79-7P,
Vasoactive intestinal polypeptide 38916-34-6P, Somatostatin
39362-14-6P, Prolactin-releasing factor 52906-92-0P, Motilin
57285-09-3P, Inhibin 58391-28-9P, Leukokinins 59763-91-6P, Pancreatic
polypeptide 64190-70-1P, FMRFamide 73019-95-1P, Egg-laying hormone
80043-53-4P, Gastrin-releasing peptide 81858-94-8P, Peptide YY (swine)
82785-45-3P, Neuropeptide Y 83652-28-2P, Calcitonin gene related peptide
85637-73-6P, Atrial natriuretic peptide 103370-86-1P, Parathormone-like
peptide 106602-62-4P, Amylin 107666-54-6P, Gonadotropin-releasing
hormone-associated peptide 114471-18-0P, Brain natriuretic peptide
116110-78-2P, Insulin-like peptide 117148-67-1P, Pancreastatin
119418-04-1P, Galanin 127830-04-0P, C-Type natriuretic peptide
137061-48-4P, Pituitary adenylate cyclase-activating polypeptide
144940-98-7P, Guanylin 164252-35-1P, Uroguanylin 193829-96-8P,
Cortistatin 245359-74-4P, Orexin

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); PROC (Process); USES (Uses)

(protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 6066-82-6, N-Hydroxysuccinimide 7423-55-4, 3-Maleimidopropionic acid
82436-78-0, N-Hydroxysulfosuccinimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT	224785-55-1P	224785-57-3P	224785-59-5P	224785-62-0P	307314-48-3P
	307314-50-7P	307314-52-9P	307314-54-1P	307314-56-3P	307314-57-4P
	307314-59-6P	307314-60-9P	307314-61-0P	307314-63-2P	307314-65-4P
	307314-67-6P	307314-69-8P	307314-71-2P	307314-73-4P	307314-75-6P
	307314-77-8P	307314-78-9P	307314-79-0P	307314-80-3P	307314-82-5P
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	308277-45-4P	308277-79-4P			

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 307315-20-4DP, conjugate with human serum albumin

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 9015-94-5P, Renin, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); PROC (Process); USES (Uses)

(substrates and inhibitors; protection of endogenous therapeutic

peptides from peptidase activity through conjugation to blood components)

IT 11063-17-5, Gastric inhibitory polypeptide (swine major) 12279-41-3,
 α 1-39-Corticotropin (human) 51257-86-4 52232-67-4 68563-24-6,
 Corticotropin-inhibiting peptide (human) 68893-82-3 75718-92-2,
 Peptide F (cattle adrenal medulla) 77465-10-2, α 1-39-Corticotropin
 (rat) 82707-63-9 83328-95-4, Dynorphin-32 (swine) 84069-10-3,
 1-40-Somatoliberin (human pancreatic islet) 84136-38-9,
 1-37-Somatoliberin (human pancreatic islet) 85568-24-7,
 1-44-Parathormone (human) 86472-71-1, Somatoliberin (rat hypothalamus)
 87713-86-8, Peptide B (cattle adrenal medulla) 87805-34-3, Glucagon-like
 peptide I (human) 88402-03-3, Defensin NP 3A (rabbit reduced)
 89492-47-7 89747-89-7, Transforming growth factor α (rat reduced)
 90599-39-6 90880-43-6 92879-83-9, α -Inhibin-31 (human seminal
 plasma) 96351-01-8 96827-07-5 98226-75-6 98614-76-7 99120-49-7,
 Glucagon-like peptide II (human) 99658-03-4 99658-10-3 100040-31-1,
 Gastric inhibitory polypeptide (human) 100915-92-2 101178-74-9
 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety)
 110616-04-1 111274-30-7, Pancreatic polypeptide (*Canis familiaris*)
 111366-38-2 112199-06-1 112540-82-6 112602-83-2, Somatoliberin
 (carp) 112938-42-8 116977-48-1, Defensin NP 4 (human reduced)
 118277-01-3 118337-11-4, Echistatin α 1 (reduced) 119977-20-7
 120298-73-9 121181-17-7, Glucagon-like peptide 1 (*Octodon degus*)
 122931-92-4 123337-90-6, Brain natriuretic peptide-45 (rat reduced)
 123757-43-7 124147-28-0, Lymphokine CINC (rat subunit reduced)
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 (mouse) 126466-47-5 126466-48-6 127609-05-6 128906-76-3, Decorsin
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 clone λ hCNP 53-amino acid isoform reduced) 137467-72-2, C-Type
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 ω -Agatoxin TK 2 (reduced) 165168-50-3, Toxin ShK (*Stoichactis*
helianthus potassium-channel reduced) 166090-74-0 166798-69-2
 171543-83-2, Urocortin (*Rattus norvegicus*) 173010-28-1, Buforin I
 174394-41-3 175524-68-2, Glucagon-like peptide 1 (*Amphiuma tridactylum*)
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 309257-46-3 309260-49-9 309260-50-2 309260-58-0 309260-63-7
 309260-66-0 309260-67-1 309260-68-2 309260-69-3 309260-72-8
 309260-73-9 309260-74-0 309260-75-1 309260-76-2

RL: PRP (Properties)

(unclaimed protein sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 309260-77-3 309260-78-4 309260-79-5 309260-80-8 309262-13-3
 309262-14-4 309262-15-5 309262-16-6 309262-17-7 309262-19-9
 309262-20-2 309262-21-3 309262-22-4 309262-23-5 309262-24-6
 309262-25-7 309262-26-8 309262-27-9 309262-28-0 309262-29-1
 309262-30-4 309262-40-6 309262-41-7 309262-42-8 309262-43-9
 309262-44-0 309262-45-1 309262-47-3 309262-50-8 309262-51-9
 309262-55-3 309262-56-4 309262-57-5 309262-59-7 309262-60-0
 309262-61-1 309290-71-9 309291-04-1 309294-09-5

RL: PRP (Properties)

(unclaimed protein sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 53-73-6 58-49-1 484-42-4 484-43-5 4037-01-8 4086-29-7
 4474-91-3 5576-42-1, α 1-16-Corticotropin 7266-47-9,
 α 1-17-Corticotropin 9063-57-4 9072-41-7, Motilin (swine)
 10587-93-6 13602-53-4 16322-68-2 16376-83-3 16941-32-5, Glucagon
 (swine) 16960-16-0, α 1-24-Corticotropin 17908-57-5,
 β -Melanotropin (human) 19941-13-0, β -Melanotropin (swine)
 20845-02-7 22006-64-0, α 1-13-Corticotropin 23025-68-5
 25422-31-5, Fibrinopeptide A (human) 26251-06-9 32204-93-6
 32222-04-1 33017-11-7, Proinsulin C-peptide (human) 33512-65-1,
 α 6-24-Corticotropin 34233-50-6 35144-91-3 37548-29-1,
 β -Cell-tropin (human) 38023-98-2 40958-31-4, Somatostatin (sheep
 reduced) 49759-44-6 51006-12-3 51833-78-4 52498-25-6, Angiotensin
 III inhibitor (human) 52530-60-6 52580-29-7 53917-42-3 55207-83-5
 55714-12-0 56317-01-2 56767-30-7 56795-64-3 57327-90-9
 57468-16-3 57468-17-4, 1-9-Substance P 57866-92-9 57899-85-1
 58108-03-5 58569-55-4, 1-5-Adrenorphin (human) 58822-25-6,
 1-5- β -Neoendorphin (human) 59004-96-5, α -Endorphin (sheep)
 59481-79-7, 1-9- α -Endorphin (sheep) 59530-69-7 59587-18-7
 59887-17-1, β -Endorphin (sheep) 60030-26-4 60030-27-5
 60149-45-3, β -Endorphin (swine) 60254-81-1 60254-82-2
 60254-83-3 60284-47-1 60556-70-9 60703-95-9 60893-02-9,
 γ -Endorphin (human) 61214-51-5, β -Endorphin (human)
 61756-22-7 61756-28-3 62568-57-4, Delta sleep-inducing peptide
 (rabbit) 63058-21-9 63373-83-1 63642-75-1 64421-69-8 64790-15-4
 65189-70-0 65418-88-4 65505-61-5 66954-40-3, δ -Endorphin
 (cattle) 67083-30-1 67224-41-3 67746-47-8 67810-56-4 68060-49-1,
 1-7-Substance P 68102-99-8, 1-26- β -Endorphin (sheep) 68232-52-0,
 1-6-Substance P 68374-46-9 68375-78-0 69361-26-8 69558-55-0
 70534-26-8, 2-9-Thymulin (swine peptide moiety) 70920-39-7 71494-20-7
 71823-87-5 71823-88-6 71977-09-8 72007-47-7 72122-62-4
 72122-63-5 72189-84-5 72601-97-9 72645-79-5, γ -Melanotropin
 (human) 72957-38-1, 1-13-Dynorphin A (swine) 73024-95-0 73726-64-4,
 1-10-Substance P 73984-05-1 74012-06-9 74171-19-0 74216-35-6
 74221-77-5 75106-71-7 75106-72-8 75148-76-4 75306-06-8,
 Somatostatin-28 (sheep reduced) 75513-71-2 75567-52-1 75645-19-1
 75909-25-0 76310-14-0, 1-6-Adrenorphin (human) 76496-10-1
 76622-26-9, 1-22-Peptide E (cattle adrenal medulla) 76622-84-9,
 1-27- β -Endorphin (human) 76901-59-2, Sperm-activating peptide H 2
 (Hemicentrotus pulcherrimus egg jelly coat) 77654-52-5 77727-17-4
 77739-20-9, α -Neoendorphin (swine) 77739-21-0, β -Neoendorphin
 (human) 77761-27-4, 6-31- β -Endorphin (human) 77875-68-4
 78151-11-8 78355-50-7, Peptide E (cattle adrenal medulla) 79243-10-0
 79358-92-2 79495-86-6, β -Endorphin (horse) 79515-35-8
 79985-35-6, 1-12-Dynorphin A (swine) 79994-24-4, 1-10-Dynorphin A

(swine) 80237-40-7 80244-69-5, Calcitonin C-peptide (rat)
 80448-90-4, Dynorphin A (swine) 80501-44-6 80755-86-8 80790-40-5
 80943-05-1 81286-16-0 81306-64-1 81478-67-3 81493-98-3
 81643-78-9, Urotensin II (*Gillichthys mirabilis* reduced) 82048-97-3
 82177-09-1 83286-22-0 83335-41-5, Dynorphin B (swine) 83404-42-6
 83404-43-7 83471-50-5 83608-80-4, 2-17-Dynorphin A (swine)
 84376-30-7, Leumorphin (swine) 84745-13-1 85344-34-9 85490-53-5,
 Motilin (*Canis familiaris*) 85916-47-8, Katalcalcin (human) 86555-35-3
 86879-15-4 87079-95-6, 6-17-Dynorphin A (swine) 87549-52-8,
 α -Bag cell peptide (*Aplysia californica*) 87549-53-9 87549-54-0
 88846-98-4, Leumorphin (human) 88866-92-6 89106-96-7, Atrial
 natriuretic peptide-21 (rat reduced) 89202-80-2, 3-13-Dynorphin A
 (swine) 89458-24-2 90686-51-4 90830-28-7, 1-29-Somatoliberin (human
 pancreatic islet) 91037-65-9 91037-75-1 91575-25-6 91575-26-7
 91853-94-0 91917-63-4, Atrial natriuretic peptide-28 (human reduced)
 91999-74-5 92169-45-4, Neuromedin N (swine spinal cord) 92952-95-9
 93511-94-5 93590-01-3, Atrial natriuretic peptide-26 (rat reduced)
 93674-95-4 93674-97-6 93674-99-8 93675-01-5 94773-24-7
 95211-04-4 95480-66-3, Atrial natriuretic peptide-25 (rat reduced)
 95480-67-4, Atrial natriuretic peptide-24 (rat reduced) 95480-70-9,
 Atrial natriuretic peptide-23 (rat reduced) 95596-38-6 96031-58-2
 96249-43-3 96426-21-0 96573-46-5 96573-86-3, Atrial natriuretic
 peptide-24 (human reduced) 96573-88-5, Atrial natriuretic peptide-23
 (human reduced) 96573-89-6, Atrial natriuretic peptide-28 (rat reduced)
 96611-51-7, 1-24-Atrial natriuretic peptide-25 (rat reduced) 96663-13-7,
 9-17-Dynorphin A (swine) 97461-82-0 97461-84-2 98897-21-3
 99027-06-2 99273-04-8 99278-03-2 99287-07-7, Defensin NP 2 (human
 reduced) 99287-08-8, Defensin NP 1 (human reduced) 99291-20-0
 99694-34-5 99896-86-3 99896-88-5 100111-07-7 100691-58-5, Atrial
 natriuretic peptide-26 (human reduced) 100808-57-9 100815-33-6
 101038-77-1 101038-78-2 101038-79-3 101038-80-6 101038-81-7
 101214-33-9 101455-37-2 101641-70-7 102029-74-3 102910-14-5,
 8-17-Dynorphin A (swine) 102989-34-4 103131-69-7, Kinetensin (human)
 103213-49-6 103217-01-2 103217-13-6 103226-11-5
 RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from
 peptidase activity through conjugation to blood components)

IT 103244-41-3 103424-74-4 103974-46-5 104180-23-6 104413-56-1
 104504-34-9 104914-40-1 105284-56-8, 1-18-Peptide E (cattle adrenal
 medulla) 105416-63-5, Atrial natriuretic peptide-25 (human reduced)
 105464-22-0 105553-21-7 105802-82-2 105802-84-4 106021-67-4
 106021-96-9 106061-19-2 106362-32-7 106686-61-7 106897-47-6
 106897-48-7 107015-83-8 107489-37-2, Thymic humoral factor γ 2
 (cattle) 107902-86-3 107978-83-6 108334-68-5 108433-95-0, Magainin
 II 108433-99-4, Magainin I 108548-50-1 108608-63-5 108682-58-2
 109024-47-7 109024-48-8 109292-46-8 109708-36-3 109708-37-4
 109770-29-8, 1-28-Glycopeptide (human clone 9-110 amyloid A4 peptide
 moiety) 109796-64-7 110121-11-4 110200-37-8 110590-64-2
 110697-44-4 110713-84-3 110765-06-5, 7-17-Dynorphin A (swine)
 112160-82-4 112160-83-5 112173-49-6 113194-00-6 113480-19-6
 113846-80-3 113851-71-1 113944-46-0 114400-89-4, Brain natriuretic
 peptide-26 (swine reduced) 114495-85-1 114640-06-1, Endothelin 1
 (swine reduced) 114681-65-1 114991-28-5 115044-69-4 115136-18-0
 115722-31-1 115918-58-6 116303-65-2, Sarafotoxin S 6b (reduced)
 116331-69-2 116495-45-5, Sarafotoxin S 6c (reduced) 116729-33-0
 116872-17-4 116920-16-2 117038-68-3 117137-85-6 117620-76-5
 117788-28-0, Sperm-activating peptide B (*Glyptocidaris crenularis* egg
 jelly coat reduced) 118068-30-7 118473-55-5, Atrial natriuretic
 peptide-29 (chicken reduced) 118691-41-1, Atrial natriuretic peptide-24
 (*Rana catesbeiana* reduced) 118691-42-2, Atrial natriuretic peptide-21
 (*Rana catesbeiana* reduced) 118934-21-7 119222-85-4 119320-26-2,
 Brain natriuretic peptide-32 (swine reduced) 119777-39-8 119798-33-3
 119965-38-7, Sarafotoxin S 6a (reduced) 120372-50-1 120550-85-8
 120928-03-2 120928-04-3, Endothelin 2 (mouse reduced) 121204-87-3
 121284-21-7 121369-79-7 121377-67-1 121379-63-3 121798-56-9
 121873-03-8, Endothelin 2 (*Canis familiaris* reduced) 121880-96-4

121892-55-5, Endothelin 3 (human clone λ ghET-3 reduced)
 122018-91-1 122680-32-4, Proinsulin C-peptide (*Anguilla anguilla*)
 123025-94-5 123148-51-6 123168-46-7 123402-49-3 123402-50-6
 123475-27-4 123924-45-8, 14-45-Brain natriuretic peptide-45 (rat reduced) 124052-07-9 124210-91-9 124361-60-0, Sarafotoxin S 6d (reduced) 124373-02-0 124932-61-2 125118-77-6, 1-16-Galanin (rat)
 125408-80-2, 1-24-Neuropeptide K (swine) 125455-58-5 125651-07-2
 125720-21-0 126035-36-7 126050-26-8, 1-9-Dynorphin B (swine)
 126144-46-5 126646-77-3 126768-94-3 127007-82-3 127119-75-9
 127574-55-4, C-Type natriuretic peptide-22 (swine reduced) 128439-39-4
 128578-18-7 128746-58-7, 3-24-Atrial natriuretic peptide-24 (human reduced) 128858-09-3 129015-19-6 129047-99-0 129437-45-2
 129449-07-6 129761-58-6 129822-19-1 130444-07-4 130571-15-2
 130571-28-7 130596-11-1 130734-57-5 130839-37-1 131023-24-0
 131204-46-1 131602-53-4 132633-98-8 132769-35-8 132796-64-6
 132996-61-3, Osteogenic growth peptide (human) 133474-20-1 133563-20-9
 133605-53-5 133605-55-7 133633-11-1 133920-04-4 134000-89-8
 134027-58-0 134282-68-1 134314-61-7 134374-28-0 134562-79-1
 134580-64-6 134649-74-4 134824-87-6 134861-50-0 134875-67-5,
 1-30-Gastric inhibitory polypeptide (swine major) 135131-17-8
 135861-49-3 135861-77-7 136005-51-1, 1-19-Galanin (human)
 136024-41-4, Galanin (human) 136033-70-0, Dermaseptin I (*Phyllomedusa sauvagei*) 136466-51-8 136831-50-0 137110-97-5 137181-56-7
 137187-39-4 137350-87-9 137350-89-1 137622-06-1 137833-31-9,
 Myelopeptide 2 137859-81-5 138039-25-5 138506-90-8 138831-86-4
 138949-73-2 139031-15-5 139446-70-1 139579-35-4 140653-38-9,
 Guanylin (rat reduced) 142385-09-9 142547-17-9, Bactenecin (reduced)
 142828-10-2 142878-29-3 142998-27-4 143257-74-3 143257-75-4
 143784-00-3 143896-15-5 143909-59-5 144092-28-4 144110-41-8
 144189-71-9 144313-54-2, Valorphin (cattle) 144450-06-6 144704-36-9
 144860-95-7 145143-20-0 145194-22-5 145224-96-0 145224-99-3
 145319-90-0, Guanylin (human reduced) 145569-99-9 145852-04-6
 147138-56-5 147262-52-0 147740-73-6 147841-68-7 147960-51-8
 148067-21-4 148914-01-6 148914-08-3 149126-06-7 149385-65-9
 149839-93-0 149839-94-1 150034-08-5 150524-76-8 150525-67-0
 150944-04-0 150944-05-1 151151-30-3 151308-33-7 151679-59-3
 152051-21-3 152051-62-2 152129-87-8 152286-31-2 153538-61-5,
 2-12-Dynorphin A (swine) 153538-69-3, 3-17-Dynorphin A (swine)
 154040-19-4 154396-74-4 154758-03-9 154974-44-4 156790-69-1
 RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT 157932-94-0 158372-06-6 158561-91-2 158622-13-0 158879-51-7
 158884-65-2 159623-45-7 159829-06-8 159964-40-6 160112-12-9
 160187-72-4 160210-00-4 160507-34-6 161206-81-1 161748-27-2
 162929-64-8 165338-06-7 166546-45-8 166546-72-1 166824-48-2,
 1-24-Neuropeptide Y (human) 167114-91-2 168633-88-3 169228-94-8,
 Luteinizing hormone-releasing factor (*Sparus auratus*) 170032-25-4
 170032-27-6 170713-75-4, Orphanin FQ (swine) 171089-50-2 171876-68-9
 172838-27-6, Protegrin 1 (reduced) 172998-24-2, 16-36-Buforin I
 174643-45-9 175799-54-9 176260-88-1 176843-96-2 176843-98-4
 178629-74-8 182374-54-5 182804-15-5 183476-25-7 183788-96-7
 185391-83-7 185391-85-9 185458-37-1 185805-61-2 185805-76-9
 186253-19-0 187345-00-2 188405-30-3 188427-41-0 188954-16-7
 189224-35-9 190436-05-6 191280-45-2 191867-98-8 191919-78-5
 191919-81-0 191919-84-3 192432-73-8 195832-30-5 198276-46-9
 198277-98-4 198333-83-4 198481-81-1 198483-36-2 198483-37-3
 198542-00-6 198623-87-9, 1-16-Gastrin-releasing peptide (human)
 198629-50-4 198757-82-3 198757-90-3 199847-29-5 200436-43-7
 202063-45-4 209121-04-0 209121-07-3 210889-41-1 211362-82-2
 211362-85-5 211918-90-0 213533-86-9 213768-42-4 215504-95-3
 217449-42-8 218787-22-5 220846-54-8 220997-11-5 221015-30-1
 221102-52-9, Uroguanylin (human reduced) 224825-60-9 239075-62-8
 249284-54-6 251903-86-3 252229-85-9 253316-46-0
 253316-55-1 254747-93-8 254965-28-1 256229-96-6 256229-97-7
 256229-98-8 256230-19-0 256230-20-3 256230-21-4 256230-22-5

256230-23-6	256230-24-7	256230-25-8	256230-26-9	256230-27-0
256230-28-1	256230-29-2	256230-30-5	256230-32-7	256230-34-9
256933-30-9	259111-03-0	259243-44-2	260060-44-4	260542-01-6
261962-20-3	263006-62-8	280748-65-4	282714-14-1	287376-78-7
292631-06-2	299161-39-0	302798-56-7	308348-98-3	308348-99-4
308349-00-0	308349-01-1	308349-02-2	308349-03-3	308349-04-4
308349-05-5	308349-06-6	308349-07-7	308349-08-8	308349-09-9
308806-02-2	309243-70-7	309243-73-0	309243-74-1	309243-75-2
309243-76-3	309243-77-4	309243-78-5	309243-79-6	309243-80-9
309243-81-0	309243-82-1	309243-83-2	309243-84-3	309243-85-4
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309243-91-2	309243-92-3	309243-93-4	309243-94-5	309243-95-6
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309244-01-7	309244-02-8	309244-03-9	309244-04-0	309244-05-1
309244-07-3	309244-08-4	309244-09-5	309244-10-8	309244-11-9
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309244-17-5	309244-18-6	309244-19-7	309244-20-0	309244-21-1
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309244-47-1	309244-48-2	309244-49-3	309244-50-6	309244-51-7
309244-52-8	309244-53-9	309244-54-0	309244-55-1	309244-56-2
309244-57-3	309244-58-4	309244-59-5	309244-60-8	309244-61-9
309244-62-0	309244-63-1	309244-64-2	309244-65-3	309244-66-4
309244-67-5	309244-68-6	309244-69-7	309244-70-0	309244-71-1

RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from
peptidase activity through conjugation to blood components)

IT	309244-72-2	309244-87-9	309244-88-0	309244-89-1	309244-90-4
	309244-91-5	309244-92-6	309244-93-7	309244-94-8	309244-95-9
	309244-96-0	309244-97-1	309244-98-2	309244-99-3	309245-00-9
	309245-01-0	309245-02-1	309245-03-2	309245-04-3	309245-05-4
	309245-06-5	309245-07-6	309245-08-7	309245-09-8	309245-10-1
	309245-11-2	309245-12-3	309245-13-4	309245-14-5	309245-15-6
	309245-16-7	309245-17-8	309245-18-9	309245-19-0	309245-20-3
	309245-21-4	309245-23-6	309245-24-7	309245-25-8	309245-26-9
	309245-27-0	309245-28-1	309245-29-2	309245-30-5	309245-31-6
	309245-32-7	309245-33-8	309245-34-9	309245-35-0	309245-36-1
	309245-37-2	309245-38-3	309245-39-4	309245-40-7	309245-41-8
	309245-42-9	309245-43-0	309245-44-1	309245-45-2	309245-46-3
	309245-47-4	309245-48-5	309245-49-6	309245-50-9	309245-51-0
	309245-52-1	309245-53-2	309245-54-3	309245-55-4	309245-56-5
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	309245-62-3	309245-63-4	309245-64-5	309245-65-6	309245-66-7
	309245-67-8	309245-68-9	309245-69-0	309245-70-3	309245-71-4
	309245-72-5	309245-73-6	309245-74-7	309245-75-8	309245-76-9
	309245-77-0	309245-78-1	309245-79-2	309245-80-5	309245-81-6
	309245-82-7	309245-83-8	309245-84-9	309245-85-0	309245-86-1
	309245-87-2	309245-88-3	309245-89-4	309245-90-7	309245-91-8
	309245-92-9	309245-93-0	309245-94-1	309245-95-2	309245-96-3
	309245-97-4	309245-98-5	309245-99-6	309246-00-2	309246-01-3
	309246-02-4	309246-03-5	309246-04-6	309246-05-7	309246-06-8
	309246-07-9	309246-08-0	309246-09-1	309246-10-4	309246-11-5
	309246-12-6	309246-13-7	309246-14-8	309246-15-9	309246-16-0
	309246-17-1	309246-18-2	309246-19-3	309246-20-6	309246-21-7
	309246-22-8	309246-24-0	309246-25-1	309246-26-2	309246-27-3
	309246-28-4	309246-29-5	309246-30-8	309246-31-9	309246-32-0
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	309246-58-0	309246-59-1	309246-60-4	309246-61-5	309246-62-6
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Search done by Noble Jarrell

309246-68-2	309246-69-3	309246-70-6	309246-71-7	309246-72-8
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309246-83-1	309246-84-2	309246-85-3	309246-86-4	309246-87-5
309246-88-6	309246-89-7	309246-90-0	309246-91-1	309246-92-2
309246-93-3	309246-94-4	309246-95-5	309246-96-6	309246-97-7
309246-98-8	309246-99-9	309247-01-6	309247-02-7	309247-03-8
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RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from
peptidase activity through conjugation to blood components)

IT	309247-28-7	309247-29-8	309247-30-1	309247-31-2	309247-32-3
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	309247-43-6	309247-44-7	309247-45-8	309247-46-9	309247-47-0
	309247-48-1	309247-49-2	309247-50-5	309247-51-6	309247-52-7
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	309247-89-0	309247-90-3	309247-91-4	309247-92-5	309247-93-6
	309247-94-7	309247-95-8	309247-96-9	309247-97-0	309247-98-1
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	309248-04-2	309248-05-3	309248-06-4	309248-07-5	309248-08-6
	309248-09-7	309248-10-0	309248-11-1	309248-12-2	309248-13-3
	309248-14-4	309248-15-5	309248-16-6	309724-00-3	

RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from
peptidase activity through conjugation to blood components)

IT 252229-85-9

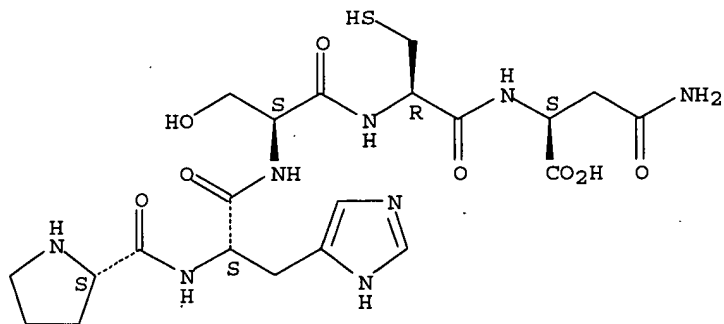
RL: PRP (Properties)

(unclaimed sequence; protection of endogenous therapeutic peptides from
peptidase activity through conjugation to blood components)

RN 252229-85-9 HCAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L24 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:688253 HCAPLUS

DN 133:248082

ED Entered STN: 29 Sep 2000

Search done by Noble Jarrell

TI Cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins
 IN Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George
 PA Human Genome Sciences, Inc., USA
 SO PCT Int. Appl., 431 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07H021-04
 ICS C07K014-00; C07K016-00; C12N015-00; C12N015-63; C12N015-85;
 C12N015-86; C12Q001-68; G01N033-53
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6, 13, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000056753	A1	20000928	WO 2000-US6765	20000316 <--	
	W:			AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:			GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	CA 2368916	AA	20000928	CA 2000-2368916	20000316 <--	
	EP 1165590	A1	20020102	EP 2000-916354	20000316 <--	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
	JP 2002539776	T2	20021126	JP 2000-606614	20000316 <--	
PRAI	US 1999-126051P	P	19990323		<--	
	US 1999-169906P	P	19991210		<--	
	WO 2000-US6765	W	20000316		<--	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2000056753	ICM	C07H021-04
		ICS	C07K014-00; C07K016-00; C12N015-00; C12N015-63; C12N015-85; C12N015-86; C12Q001-68; G01N033-53
	WO 2000056753	ECLA	C07K014/47 <--
AB	The present invention relates to 49 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.		
ST	secretory protein cDNA sequence human		
IT	Animal cell line (CHO, recombinant host; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)		
IT	Genetic element RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (GAS (gamma activation site), Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)		
IT	Genetic element RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (IRS (interferon-responsive sequence), Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)		

- IT Signal transduction, biological
(Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Transcription factors
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(NF- κ B (nuclear factor κ B), high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Animal cell line
(SF9, recombinant host; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(STAT, Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Genetic mapping
(chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Drugs
Epitopes
Gene therapy
Molecular cloning
(cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Antibodies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Gene, animal
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Signal peptides
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Diagnosis
Mutation
(disease diagnosis by mutation detection; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT cDNA sequences
(for 49 human secreted proteins)
- IT Immunoglobulins
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fusion products; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT T cell (lymphocyte)
(high-throughput screening assays for T-cell activity; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Chromosome
(human, chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Animal cell
(mammalian, recombinant host; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)
- IT Hematopoietic precursor cell
(myeloid, high-throughput screening assays for myeloid activity; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

proteins)

IT Nerve
(neuron, high-throughput screening assays for neuronal activity;
cloning and cDNA and deduced amino acid sequences of 49 human secreted
proteins)

IT Protein sequences
(of 49 human secreted proteins)

IT Biological transport
(permeation, high-throughput screening assays; cloning and cDNA and
deduced amino acid sequences of 49 human secreted proteins)

IT Phosphorylation, biological
(protein, high-throughput screening assays; cloning and cDNA and
deduced amino acid sequences of 49 human secreted proteins)

IT Escherichia coli
(recombinant host; cloning and cDNA and deduced amino acid sequences of
49 human secreted proteins)

IT Proteins, specific or class
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
(Biological study, unclassified); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES
(Uses)
(secretory; cloning and cDNA and deduced amino acid sequences of 49
human secreted proteins)

IT Animal tissue
(tissue distributions; cloning and cDNA and deduced amino acid
sequences of 49 human secreted proteins)

IT 200734-94-7P, Sarcosine (human) 294625-48-2P 294625-49-3P
294625-50-6P 294625-51-7P 294625-52-8P 294625-53-9P 294625-54-0P
294625-55-1P 294625-56-2P 294625-57-3P 294625-58-4P 294625-59-5P
294625-60-8P 294625-61-9P 294625-62-0P 294625-63-1P 294625-64-2P
294684-77-8P 294684-78-9P 294684-79-0P 294684-80-3P 294684-81-4P
294684-82-5P 295312-63-9P 295312-64-0P 295316-67-5P 295316-73-3P
295316-78-8P 295316-81-3P 295316-83-5P 295316-85-7P 295316-86-8P
295316-87-9P 295316-89-1P 295316-91-5P 295316-92-6P 295316-93-7P
295316-95-9P 295316-96-0P 295316-98-2P 295316-99-3P 295317-00-9P
295317-01-0P 295317-03-2P 295317-07-6P 295317-09-8P
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
(Biological study, unclassified); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES
(Uses)
(amino acid sequence; cloning and cDNA and deduced amino acid sequences
of 49 human secreted proteins)

IT 294684-28-9P 294684-29-0P 294684-30-3P 294684-31-4P 294684-32-5P
294684-33-6P 294684-34-7P 294684-35-8P 294684-36-9P 294684-37-0P
294684-38-1P 294684-39-2P 294684-40-5P 294684-41-6P 294684-42-7P
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294684-48-3P 294684-49-4P 294684-50-7P 294684-51-8P 294684-52-9P
294684-53-0P 294684-54-1P 294684-55-2P 294684-56-3P 294684-57-4P
294684-58-5P 294684-59-6P 294684-60-9P 294684-61-0P 294684-62-1P
294684-63-2P 294684-64-3P 294684-65-4P 294684-66-5P 294684-67-6P
294684-68-7P 294684-69-8P 294684-70-1P 294684-71-2P 294684-72-3P
294684-73-4P 294684-74-5P 294684-75-6P 294684-76-7P
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
(Biological study, unclassified); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES
(Uses)
(nucleotide sequence; cloning and cDNA and deduced amino acid sequences
of 49 human secreted proteins)

IT 229477-44-5 244008-03-5, PN: WO9947540 SEQID: 3 unclaimed DNA
244008-06-8, PN: WO9947540 SEQID: 4 unclaimed DNA 244008-07-9, PN:
WO9947540 SEQID: 5 unclaimed DNA 244008-08-0, PN: WO9947540 SEQID: 6
unclaimed DNA 244008-09-1, PN: WO9947540 SEQID: 7 unclaimed DNA
244008-12-6, 19: PN: WO9962934 PAGE: 65 unclaimed DNA 244008-13-7, PN:
WO9947540 SEQID: 9 unclaimed DNA 244008-14-8, PN: WO9947540 SEQID: 10
unclaimed DNA
RL: PRP (Properties)

(unclaimed nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

IT 172643-13-9 292889-25-9 294686-12-7 294686-13-8 294686-14-9
 294686-15-0 294686-16-1 294686-17-2 294686-18-3 294686-19-4
 294686-20-7 294686-21-8 294686-22-9 294686-23-0 294686-24-1
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 295312-66-2 295317-11-2 295317-12-3 295317-13-4 295317-14-5
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 295318-68-2 295318-97-7 295319-26-5 295319-50-5 295319-80-1
 295320-02-4 295320-26-2 295320-42-2 295320-44-4 295320-52-4
 295320-57-9 295320-64-8 295320-65-9 295320-66-0 295320-67-1
 295320-71-7

RL: PRP (Properties)

(unclaimed protein sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

IT 294625-65-3 294625-66-4 294625-67-5 294625-68-6 294625-69-7
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 294625-81-3 294625-82-4 294625-83-5 294625-84-6 294625-85-7
 294625-86-8 294625-87-9 294625-88-0 294625-90-4 294625-91-5
 294625-92-6 294625-93-7 294625-94-8 294625-95-9 294625-96-0
 294625-97-1 294625-98-2 294625-99-3 294626-00-9
 294626-01-0 294626-02-1 294626-03-2 294626-04-3 294626-05-4
 294626-06-5 294626-07-6 294626-08-7

RL: PRP (Properties)

(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Isomura; Database GenEmbl, section 2/19 2000, AP000066
- (2) Marra; Database EST 1998, AI042727
- (3) Strausberg; Database EST 1998, AI285709

IT 294625-98-2

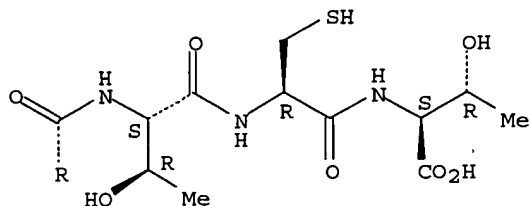
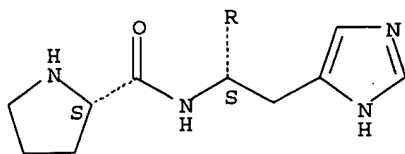
RL: PRP (Properties)

(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

RN 294625-98-2 HCAPLUS

CN L-Threonine, L-prolyl-L-histidyl-L-threonyl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:666747 HCAPLUS
 DN 133:233609

Search done by Noble Jarrell

ED Entered STN: 22 Sep 2000
 TI Cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins
 IN Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George
 PA Human Genome Sciences, Inc., USA
 SO PCT Int. Appl., 428 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07H021-04
 ICS C07K014-00; C07K016-00; C12N015-00; C12N015-63; C12N015-85; C12N015-86; C12Q001-68; G01N033-53
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6, 13, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000055175	A1	20000921	WO 2000-US6049	20000309 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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EP 1159287	A1	20011205	EP 2000-917795	20000309 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
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PRAI US 1999-124144P	P	19990312	<--	
US 1999-138574P	P	19990611	<--	
US 1999-168667P	P	19991203	<--	
WO 2000-US6049	W	20000309	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000055175	ICM	C07H021-04
	ICS	C07K014-00; C07K016-00; C12N015-00; C12N015-63; C12N015-85; C12N015-86; C12Q001-68; G01N033-53
WO 2000055175	ECLA	C07K014/47 <--

AB The present invention relates to 50 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.

ST secretory protein cDNA sequence human

IT Animal cell line

(CHO, recombinant host; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Genetic element

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (GAS (gamma activation site), Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Genetic element

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (IRS (interferon-responsive sequence), Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

- acid sequences of 50 human secreted proteins)
- IT Signal transduction, biological
 - (Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Transcription factors
 - RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 - (NF- κ B (nuclear factor κ B), high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Animal cell line
 - (SF9, recombinant host; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Transcription factors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (STAT, Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Genetic mapping
 - (chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Drugs
 - Epitopes
 - Gene therapy
 - Molecular cloning
 - (cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Antibodies
 - RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 - (cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Gene, animal
 - RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
 - (cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Signal peptides
 - RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
 - (cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Diagnosis
 - Mutation
 - (disease diagnosis by mutation detection; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT cDNA sequences
 - (for 50 human secreted proteins)
- IT Immunoglobulins
 - RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (fusion products; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT T cell (lymphocyte)
 - (high-throughput screening assays for T-cell activity; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Chromosome
 - (human, chromosomal mapping of secreted protein genes; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Animal cell
 - (mammalian, recombinant host; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)
- IT Hematopoietic precursor cell
 - (myeloid, high-throughput screening assays for myeloid activity;

cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Nerve
(neuron, high-throughput screening assays for neuronal activity;
cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Protein sequences
(of 50 human secreted proteins)

IT Biological transport
(permeation, high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Phosphorylation, biological
(protein, high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Escherichia coli
(recombinant host; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Proteins, specific or class
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(secretory; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT Animal tissue
(tissue distributions; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT 292023-24-6P 292023-25-7P 292023-26-8P 292023-27-9P 292023-28-0P
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RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

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RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

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244008-12-6, 19: PN: WO9962934 PAGE: 65 unclaimed DNA 244008-13-7, PN: WO9947540 SEQID: 9 unclaimed DNA 244008-14-8, PN: WO9947540 SEQID: 10 unclaimed DNA

RL: PRP (Properties)

(unclaimed nucleotide sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

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 292158-33-9 292158-35-1 292158-38-4 292158-40-8 292158-52-2
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RL: PRP (Properties)

(unclaimed protein sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

IT 292023-38-2 292023-39-3 292023-40-6 292023-41-7 292023-42-8
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 292023-47-3 292102-94-4 292145-32-5

RL: PRP (Properties)

(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; Database GENEMBL
- (2) Anon; Database GENEMBL
- (3) Blum; J Biol Chem 1996, V271(29), P17183 HCAPLUS
- (4) Blum; J Biol Chem 1996, V271(29), P17183 HCAPLUS
- (5) Holthuis; Biochem J 1995, V312, P205 HCAPLUS
- (6) Rojo; J Cell Biol 1997, V139(5), P1119 HCAPLUS
- (7) Sanseau; Direct Submission 1996
- (8) Sherrington; Nature 1995, V375(6534), P754 HCAPLUS
- (9) Sohn; J Cell Biol 1996, V135(5), P1239 HCAPLUS
- (10) Trower; Proc Natl Acad Sci U S A 1996, V93, P1366 HCAPLUS

IT 292023-45-1

RL: PRP (Properties)

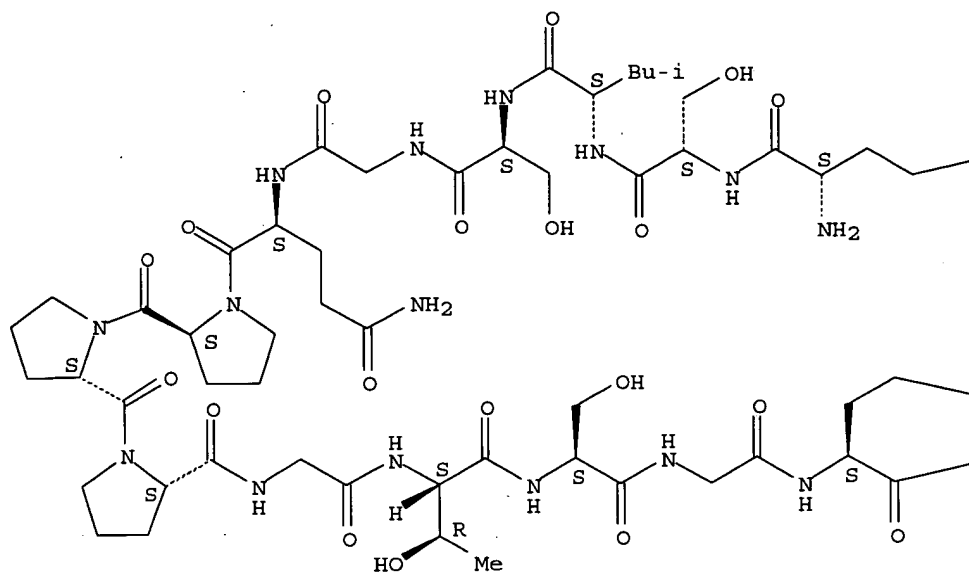
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 50 human secreted proteins)

RN 292023-45-1 HCAPLUS

CN L-Threonine, L-methionyl-L-seryl-L-leucyl-L-serylglycyl-L-glutaminyl-L-prolyl-L-prolyl-L-prolylglycyl-L-threonyl-L-serylglycyl-L-methionyl-L-alanyl-L-prolyl-L-histidyl-L-seryl-L-methionyl-L-alanyl-L-valyl-L-valyl-L-seryl-L-threonyl-L-alanyl- (9CI) (CA INDEX NAME)

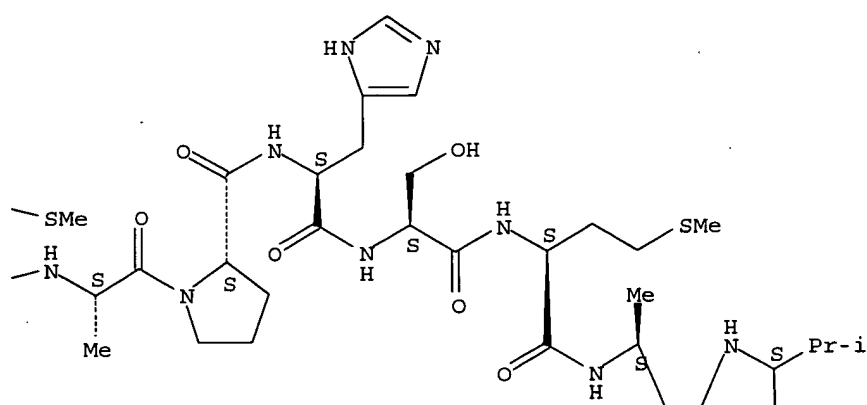
Absolute stereochemistry.

PAGE 1-A

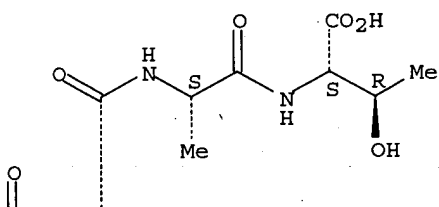


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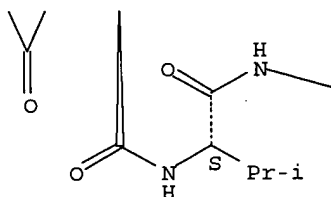
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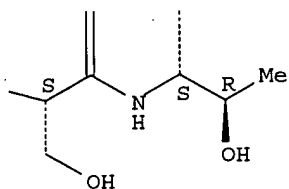
PAGE 1-C



PAGE 2-B



PAGE 2-C



L24 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:608780 HCAPLUS
 DN 133:206771
 ED Entered STN: 01 Sep 2000
 TI Epitopes or mimotopes derived from the Cε2 domain of IgE,
 antagonists thereof, and their therapeutic uses
 IN Dyson, Michael; Friede, Martin; Greenwood, Judith; Hewitt, Ellen; Lamont,
 Alan; Mason, Sean; Randall, Roger; Turnell, William Gordon; Van Mechelen,
 Marcelle Paulette; Vinals y De Bassols, Carlota
 PA Smithkline Beecham Biologicals SA, Belg.; Peptide Therapeutics Limited
 SO PCT Int. Appl., 129 pp.
 CODEN: PIXXD2

Search done by Noble Jarrell

DT Patent
 LA English
 IC ICM C07K016-00
 ICS C07K016-42; A61K039-00; A61K039-385; A61K039-395; G01N033-577;
 G01N033-68; A61P037-08
 CC 15-3 (Immunochemistry)
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000050460	A1	20000831	WO 2000-EP1455	20000222 <--
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	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
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	AU 2000026727	A5	20000914	AU 2000-26727	20000222 <--
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	EP 1155037	A1	20011121	EP 2000-905073	20000222 <--
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	GB 1999-7151	A	19990329	<--	
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	GB 1999-27698	A	19991123	<--	
	WO 2000-EP1455	W	20000222	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000050460	ICM	C07K016-00
	ICS	C07K016-42; A61K039-00; A61K039-385; A61K039-395; G01N033-577; G01N033-68; A61P037-08
WO 2000050460	ECLA	A61K047/48R2V; A61K047/48R2H; C07K016/00; C07K016/42M10 <--
JP 2004538238	FTERM	4C084/AA02; 4C084/AA06; 4C084/AA07; 4C084/AA17; 4C084/BA01; 4C084/BA02; 4C084/BA08; 4C084/BA18; 4C084/BA19; 4C084/BA23; 4C084/BA44; 4C084/DA01; 4C084/NA14; 4C084/ZB052; 4C084/ZB072; 4C084/ZB132; 4C085/AA03; 4C085/AA13; 4C085/AA14; 4C085/BB11; 4C085/BB35; 4C085/CC22; 4C085/CC23; 4C085/DD02; 4C085/DD21; 4C085/DD62; 4C085/DD63; 4C085/EE01; 4C085/EE06; 4C085/FF24; 4H045/AA10; 4H045/AA11; 4H045/AA20; 4H045/BA10; 4H045/BA13; 4H045/BA14; 4H045/BA15; 4H045/BA16; 4H045/BA17; 4H045/BA41; 4H045/CA40; 4H045/DA76; 4H045/DA86; 4H045/EA28; 4H045/EA50; 4H045/FA34; 4H045/FA44; 4H045/FA51; 4H045/FA72; 4H045/FA74; 4H045/GA22 <--

AB The present invention relates to the provision of novel medicaments for the treatment, prevention or amelioration of allergic disease. In particular, the novel medicaments are isolated peptides incorporating epitopes or mimotopes of surface exposed regions of the C_{e2} domain of

IgE. The inventors have found that these novel regions may be the target for both passive and active immunoprophylaxis or immunotherapy. The invention further relates to methods for production of the medicaments, pharmaceutical compns. containing them and their use in medicine. Also forming an aspect of the present invention are ligands, especially monoclonal antibodies, which are capable of binding the surface exposed IgE regions of the present invention, and their use in medicine as passive immunotherapy or in immunoprophylaxis.

- ST IgE Cepsilon2 epitope mimotope vaccine immunotherapy
- IT Proteins, specific or class
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (D; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Immunoglobulins
 - RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (E, Cε2 domain; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Ligands
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (PTmAb0005 and PTmAb0011; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Immunostimulants
 - (adjuvants; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Purification
 - (affinity; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Diagnosis
 - (agents; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Antibodies
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (anti-IgE; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Drug delivery systems
 - (carriers; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Adoptive immunotherapy
 - Allergy
 - Allergy inhibitors
 - Blood
 - Epitopes
 - Immunotherapy
 - Protein sequences
 - Susceptibility (genetic)
 - Vaccines
 - (epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Fusion proteins (chimeric proteins)
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)
- IT Antigens

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B core; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)

IT Peptides, biological studies

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mimotope; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)

IT Antibodies

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)

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RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(epitopes or mimotopes derived from the Cε2 domain of IgE and antagonists for active and passive immunotherapy of allergic disease)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Hamburger, R; US 4171299 A 1979 HCAPLUS
- (2) Heusser, C; CURRENT OPINION IN IMMUNOLOGY 1997, V9(6), P805 HCAPLUS
- (3) Sahin, U; WO 9904265 A 1999 HCAPLUS
- (4) Shakib, F; INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY 1991, V95(2-3), P102 HCAPLUS
- (5) United States Dept Of Health And Human Services Usa; WO 9824808 A 1998 HCAPLUS

IT 289886-58-4

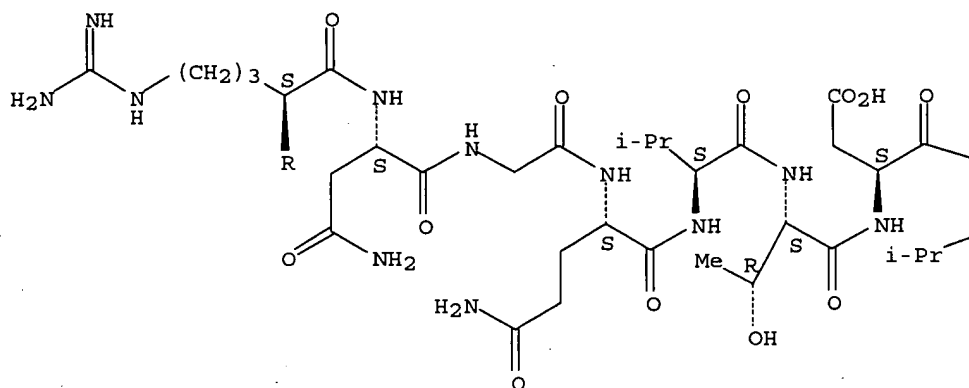
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(Therapeutic use); BIOL (Biological study); USES (Uses)
(epitopes or mimotopes derived from the Cε2 domain of IgE and
antagonists for active and passive immunotherapy of allergic disease)

RN 289886-58-4 HCAPLUS

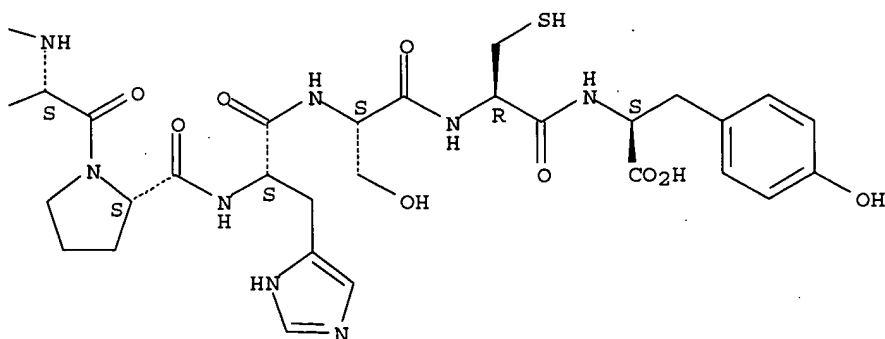
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valyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

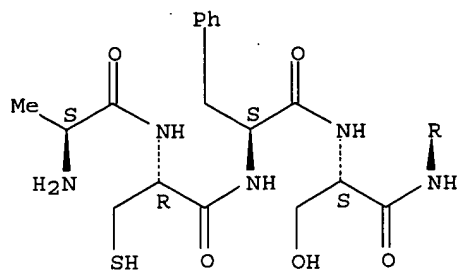
PAGE 1-A



PAGE 1-B



PAGE 2-A



L24 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:102218 HCAPLUS

DN 132:245978

ED Entered STN: 13 Feb 2000

TI Anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma

AU Livant, Donna L.; Brabec, R. Kaye; Pienta, Kenneth J.; Allen, David L.; Kurachi, Kotoku; Markwart, Sonja; Upadhyaya, Ameet

CS Department of Cell and Development Biology, University of Michigan Medical School, Ann Arbor, MI, 48109-0616, USA

SO Cancer Research (2000), 60(2), 309-320

CODEN: CNREA8; ISSN: 0008-5472

PB AACR Subscription Office

DT Journal

LA English

CC 1-6 (Pharmacology)

AB Using naturally serum-free SU-ECM basement membranes as invasion substrates showed that plasma fibronectin was necessary to stimulate invasion by DU 145 human and metastatic MATLyLu (MLL) rat prostate carcinoma cells. This activity mapped to the PHSRN sequence, which induced invasion through $\alpha 5 \beta 1$ integrin. PHSCN, a competitive inhibitor, blocked both PHSRN- and serum-induced invasion. Acetylated, amidated PHSCN (Ac-PHSCN-NH₂) was 30-fold more potent; however, Ac-HSPNC-NH₂ was inactive. Rats receiving injections s.c. with 100,000 MLL cells were treated systemically by i.v. injection three times weekly with 1 mg of either Ac-PHSCN-NH₂ or Ac-HSPNC-NH₂ beginning 24 h later, three times weekly with 1 mg of Ac-PHSCN-NH₂ beginning only after surgery to remove large (2 cm) MLL tumors, or were left untreated. MLL tumors grew rapidly in Ac-HSPNC-NH₂-treated and in untreated rats. MLL tumor growth in rats treated with Ac-PHSCN-NH₂ beginning 1 day after MLL cell injection was reduced by 99.9% during the first 16 days of treatment, although subsequent tumor growth occurred. MLL tumor cryosections immunostained with anti-PECAM-1 showed that Ac-PHSCN-NH₂ inhibited neovascularization by 12-fold during this time. Whether initiated after MLL cell injection or only after MLL tumor removal, Ac-PHSCN-NH₂ treatment reduced the nos. of MLL lung colonies and micrometastases by 40- to > 100-fold, whereas Ac-HSPNC-NH₂ was inactive. Thus, Ac-PHSCN-NH₂ may be a potent antitumorigenic and antimetastatic agent for postsurgical use prior to extensive metastasis.

ST antitumorigenic antimetastatic PHSCN sequence prostate carcinoma; lung metastasis inhibitor prostate anticancer AcPHSCNNH₂

IT Angiogenesis inhibitors

Protein sequences

(anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT Prostate gland

Prostate gland

(carcinoma, inhibitors; anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT Lung, neoplasm

(inhibitors, metastasis; anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT Antitumor agents
(lung, metastasis; anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT Lung, neoplasm
(metastasis, inhibitors; anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT Antitumor agents
(prostate carcinoma; anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

IT 262438-43-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

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IT 262438-43-7

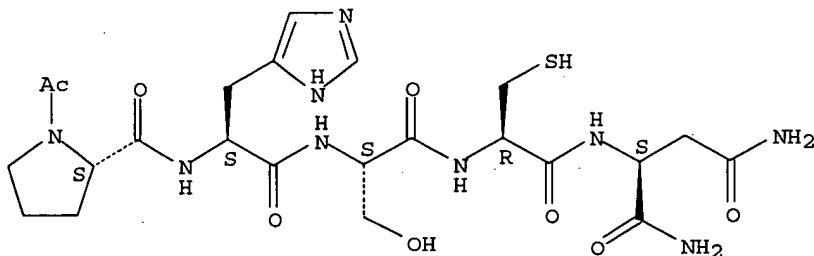
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

RN 262438-43-7 HCAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:794362 HCAPLUS

DN 132:30820

ED Entered STN: 16 Dec 1999

TI Anticancer compounds and methods

IN Livant, Donna L.

PA Regents of the University of Michigan, USA

SO U.S., 53 pp., Cont.-in-part of U. S. 5,840,514.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K038-00

ICS A61K038-08

INCL 530330000

CC 1-6 (Pharmacology)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6001965	A	19991214	US 1997-915189	19970820 <--
	US 5840514	A	19981124	US 1996-754322	19961121 <--
	CA 2264570	AA	19980528	CA 1997-2264570	19971120 <--
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Search done by Noble Jarrell

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
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 GN, ML, MR, NE, SN, TD, TG

EP 928340 A1 19990714 EP 1997-949632 19971120 <--
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US 5989850 A 19991123 US 1998-140047 19980826 <--
 US 6472369 B1 20021029 US 1999-373694 19990813 <--
 AU 765126 B2 20030911 AU 2001-51984 20010618 <--
 US 2003083264 A1 20030501 US 2002-237850 20020909 <--

PRAI US 1996-754322 A2 19961121 <--
 US 1997-915189 A 19970820 <--
 WO 1997-US21674 W 19971120 <--
 US 1999-373694 A3 19990813 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6001965	ICM	A61K038-00
	ICS	A61K038-08
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US 5840514	NCL	435/029.000; 435/004.000; 514/002.000; 514/021.000; 530/300.000; 530/323.000; 530/324.000; 530/325.000; 530/326.000; 530/327.000; 530/328.000; 530/329.000; 530/330.000; 530/350.000; 530/382.000
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WO 9822617	ECLA	A61K038/08; A61K038/39; C07K014/78 <--
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	ECLA	A61K038/08; A61K038/39; C07K014/78 <--
OS	MARPAT 132:30820	
AB	The testing of tumor cells, including human tumors capable of metastases, in assays employing fibronectin-depleted substrates is described. Ex vivo induction of cells, including biopsied human cells, is performed with invasion-inducing agents. Addnl., anti-cancer chemotherapeutics are described. Specifically, chemotherapeutic agents which have anti-metastatic and anti-growth properties are described.	
ST	antitumor peptide metastasis inhibition; prostate cancer metastasis antitumor peptide	
IT	Peptides, biological studies	
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)	
	(antitumor peptides and inhibition of metastasis)	
IT	Antitumor agents	
	(mammary gland; antitumor peptides and inhibition of metastasis)	
IT	Antitumor agents	
	(metastasis; antitumor peptides and inhibition of metastasis)	
IT	Mammary gland	
	Mammary gland	
	Prostate gland	
	Prostate gland	
	(neoplasm, inhibitors; antitumor peptides and inhibition of metastasis)	
IT	Antitumor agents	
	(prostate gland; antitumor peptides and inhibition of metastasis)	
IT	Fibronectins	
	RL: BSU (Biological study, unclassified); BIOL (Biological study)	
	(testing of tumor cells in assays involving fibronectin-depleted substrates)	
IT	91037-75-1 99896-85-2 99896-88-5 131167-89-0 158622-13-0	
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252230-01-6	252230-02-7	252230-05-0		

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor peptides and inhibition of metastasis)

IT 252362-03-1 252362-12-2

RL: PRP (Properties)

(unclaimed protein sequence; anticancer compds. and methods)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT 252229-85-9 252230-05-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

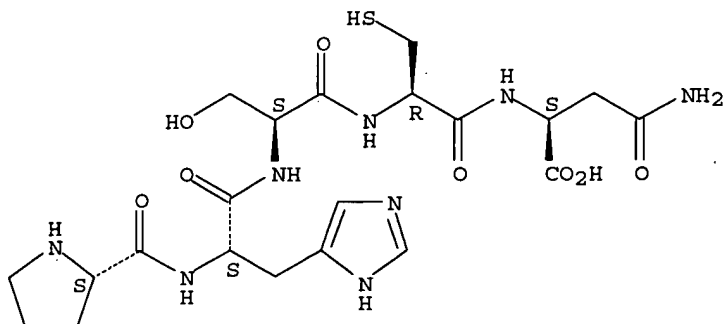
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(antitumor peptides and inhibition of metastasis)

RN 252229-85-9 HCAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteiny- (9CI) (CA INDEX NAME)

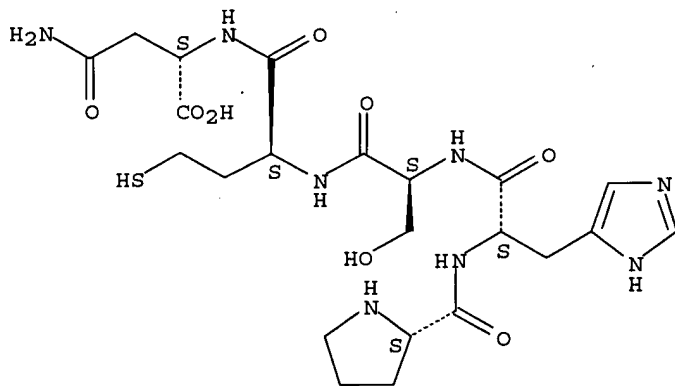
Absolute stereochemistry.



RN 252230-05-0 HCAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-homocysteiny- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1988:72012 HCAPLUS

DN 108:72012

ED Entered STN: 05 Mar 1988

TI Phototransformation pathway of phytochrome

AU Inoue, Y.

CS Fac. Sci., Univ. Tokyo, Tokyo, 113, Japan

SO Springer Proceedings in Physics (1987), 20 (Primary Processes Photobiol.), 70-9

CODEN: SPPPEL; ISSN: 0930-8989

DT Journal; General Review

LA English

CC 11-0 (Plant Biochemistry)

AB A review with 56 refs.

ST review phytochrome phototransformation

IT Photolysis

(of phytochromes, pathway of)

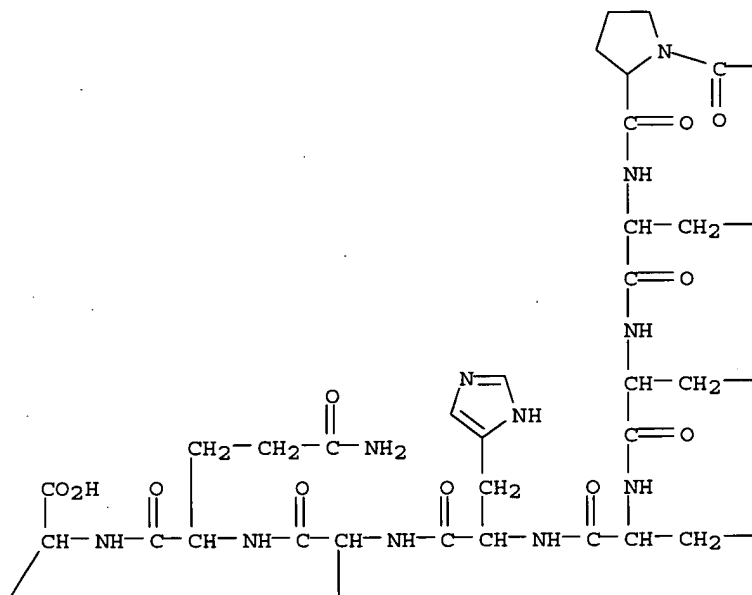
IT Phytochromes

RL: BIOL (Biological study)

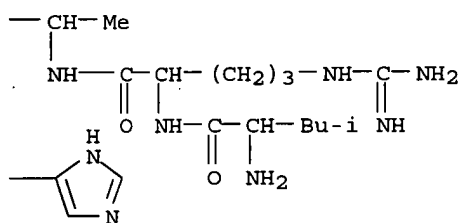
Search done by Noble Jarrell

(phototransformation pathway of)
 IT 73508-81-3
 RL: BIOL (Biological study)
 (phototransformation pathway of)
 IT 73508-81-3
 RL: BIOL (Biological study)
 (phototransformation pathway of)
 RN 73508-81-3 HCAPLUS
 CN L-Tyrosine, N- [N2- [N- [N- [S- [1- [8,12-bis(2-carboxyethyl)-18-ethenyl-1,2,3,19,22,24-hexahydro-2,7,13,17-tetramethyl-1,19-dioxo-21H-bilin-3-yl]ethyl]-N- [N- [N- [1- [N- (N2-L-leucyl-L-arginyl)-L-alanyl]-L-prolyl]-L-histidyl]-L-seryl]-L-cysteinyl]-L-histidyl]-L-leucyl]-L-glutaminyll]-, [2R,3R(R)]- (9CI) (CA INDEX NAME)

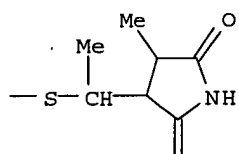
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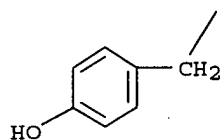
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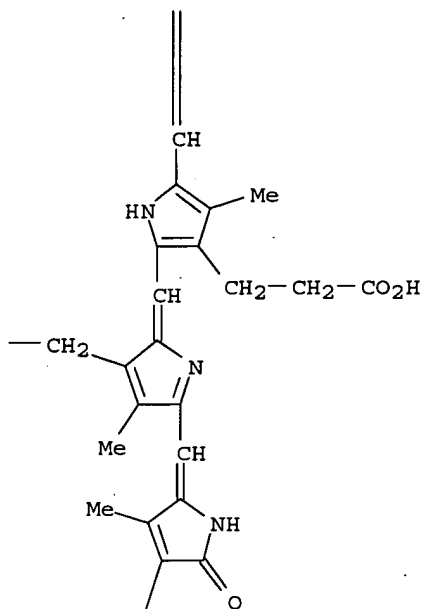
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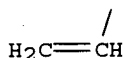
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HO₂C---CH₂---

PAGE 2-B



PAGE 3-B



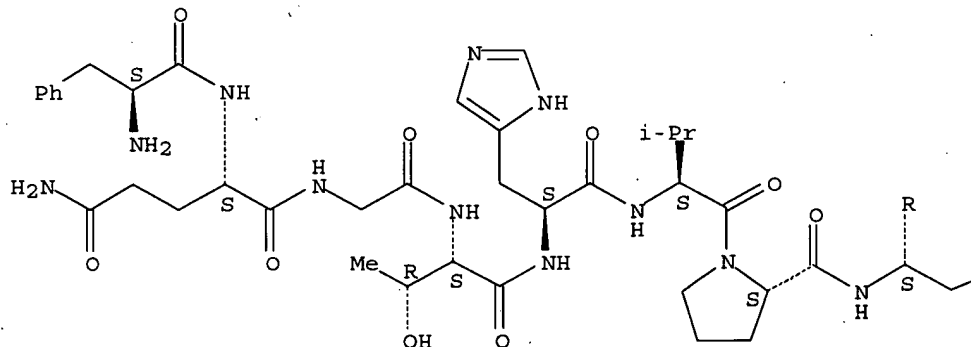
L24 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:405411 HCAPLUS
 DN 107:5411
 ED Entered STN: 11 Jul 1987
 TI Molecular interactions in the "GAT" idiotypic network: an approach using synthetic peptides
 AU Mazza, G.; Guigou, V.; Moinier, D.; Corbet, S.; Ollier, P.; Fougereau, M.
 CS Cent. Immunol., INSERM-CNRS Marseille-Luminy, Marseille, 13288, Fr.
 SO Annales de l'Institut Pasteur/Immunology (1987), 138(1), 3-17
 CODEN: AIPIEP; ISSN: 0769-2625
 DT Journal
 LA English
 CC 15-2 (Immunochemistry)
 AB In order to approach some of the dominant epitopes which are recognized in the GAT (Glu60Ala30Tyr10)n random terpolymer, a variety of peptides containing 7-14 residues were synthesized using glutamic acid and tyrosine as building blocks, and thus were able to mimic determinants common to GAT and GT (Glu50Tyr50)n. One decapeptide and one dodecapeptide inhibited GT-mAb1 (or mAb1') binding to the same extent as GAT. Antibodies were also raised against synthetic peptides which reproduced the sequence of the 6 complementarity-determining regions of the germline anti-GAT Ab1 antibody. Antibodies were obtained against all peptides except L1, and were shown to recognize the native Ab1-Fab. Surprisingly, some of these antibodies also recognized GAT, i.e. anti-L2, anti-H2, and anti-H3, an observation which speaks in favor of a triggering of the idiotypic network at the Ab3 level. Finally, a monoclonal antibody derived from an immunization with an Ab2-D region synthetic peptide was found to be of the Ag+Id- type. Sequence data indicate that the light chain at least is completely different from that of the Ab1/Ab1', which uses only a very precise pair of V germline genes.

Search done by Noble Jarrell

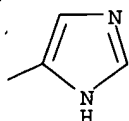
ST GAT peptide antibody idiotype
 IT Antibodies
 RL: PREP (Preparation)
 (GAT idiotypic network of, preparation of peptides for study of)
 IT Peptides, preparation
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
 (preparation and antigenicity of, for GAT idiotypic network study)
 IT 31325-29-8, GAT
 RL: BIOL (Biological study)
 (antibody idiotypic network system involving, mol. interactions in, preparation of peptides for study of)
 IT 108526-51-8P 108526-52-9P 108526-53-0P 108526-54-1P
 108526-55-2P 108543-65-3P
 RL: PREP (Preparation)
 (preparation and antibodies binding to, in GAT idiotypic network studies)
 IT 31325-39-0P
 RL: PREP (Preparation)
 (preparation and antigenicity of peptides like, in GAT idiotypic network studies)
 IT 108526-56-3P 108526-57-4P 108526-58-5P 108526-59-6P 108526-60-9P
 108526-61-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
 (preparation and antigenicity of, in GAT idiotypic network studies)
 IT 108526-54-1P
 RL: PREP (Preparation)
 (preparation and antibodies binding to, in GAT idiotypic network studies)
 RN 108526-54-1 HCAPLUS
 CN L-Cysteine, N-[N-[N-[1-[N-[N-[N-(N2-L-phenylalanyl-L-glutaminy)]glycyl]-L-threonyl]-L-histidyl]-L-valyl]-L-prolyl]-L-histidyl]-L-threonyl]- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

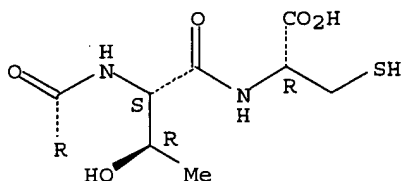
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PAGE 1-B



PAGE 2-A



L24 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:604942 HCAPLUS
 DN 105:204942
 ED Entered STN: 13 Dec 1986
 TI Site-directed antisera to the chromophore binding site of phytochrome: characterization and cross-reactivity
 AU Mercurio, Frank M.; Houghten, Richard A.; Lagarias, J. Clark
 CS Dep. Biochem. Biophys., Univ. California, Davis, CA, 95616, USA
 SO Archives of Biochemistry and Biophysics (1986), 248(1), 35-42
 CODEN: ABBIA4; ISSN: 0003-9861
 DT Journal
 LA English
 CC 6-3 (General Biochemistry)
 Section cross-reference(s): 11, 15
 AB The preparation and characterization of antisera to a synthetic undecapeptide which encompasses the chromophore binding site on oat phytochrome are described. By direct enzyme-linked immunosorbent assay, this antiserum recognizes bilin-linked peptides in proteolytic digestion mixts. of phytochrome from several plant species including the monocot species, oat and maize, and dicot species, pea. Competitive enzyme-linked immunosorbent assays were used to establish the specificity of the site-directed antisera for those peptides homologous with the synthetic undecapeptide which are present in complex mixts. Apparently, the local environment of the phytochromobilin prosthetic group is structurally conserved.
 ST phytochrome chromophore binding site
 IT Phytochromes
 RL: BIOL (Biological study)
 (chromophore binding site of, characterization of)
 IT Corn
 Oat
 Pea
 (phytochrome of, chromophore binding site of, characterization of)
 IT Evolution
 (conservative, of phytochrome chromophore binding site)

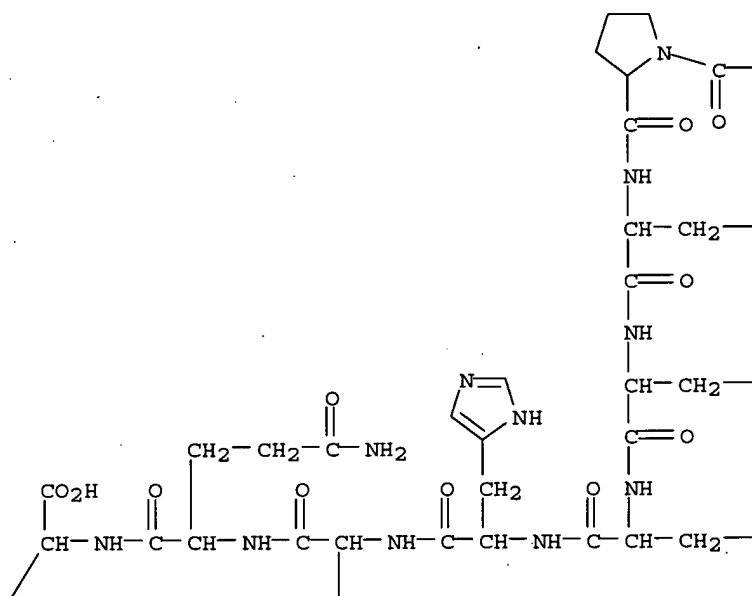
Search done by Noble Jarrell

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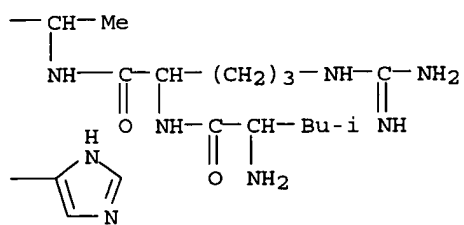
IT      Antibodies
        RL: BIOL (Biological study)
           (monoclonal, to chromophore binding site of phytochrome)
IT      73508-81-3 103516-77-4
        RL: RCT (Reactant); RACT (Reactant or reagent)
           (reaction of, with antiserum, characterization of chromophore binding
            site of phytochrome in relation to)
IT      73508-81-3 103516-77-4
        RL: RCT (Reactant); RACT (Reactant or reagent)
           (reaction of, with antiserum, characterization of chromophore binding
            site of phytochrome in relation to)
RN      73508-81-3 HCAPLUS
CN      L-Tyrosine, N- [N2- [N- [N- [S- [1- [8,12-bis(2-carboxyethyl)-18-ethenyl-
1,2,3,19,22,24-hexahydro-2,7,13,17-tetramethyl-1,19-dioxo-21H-bilin-3-
yl]ethyl]-N- [N- [N- [1- [N- (N2-L-leucyl-L-arginyl)-L-alanyl]-L-prolyl]-L-
histidyl]-L-seryl]-L-cysteinyl]-L-histidyl]-L-leucyl]-L-glutaminyll]-,
[2R,3R(R)]- (9CI) (CA INDEX NAME)

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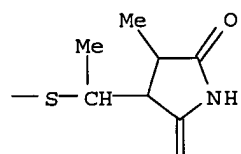
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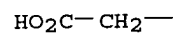
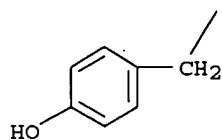
PAGE 1-B



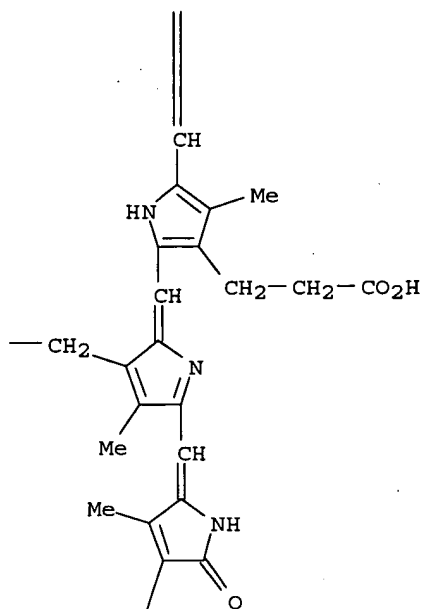
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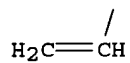
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PAGE 2-B



PAGE 3-B

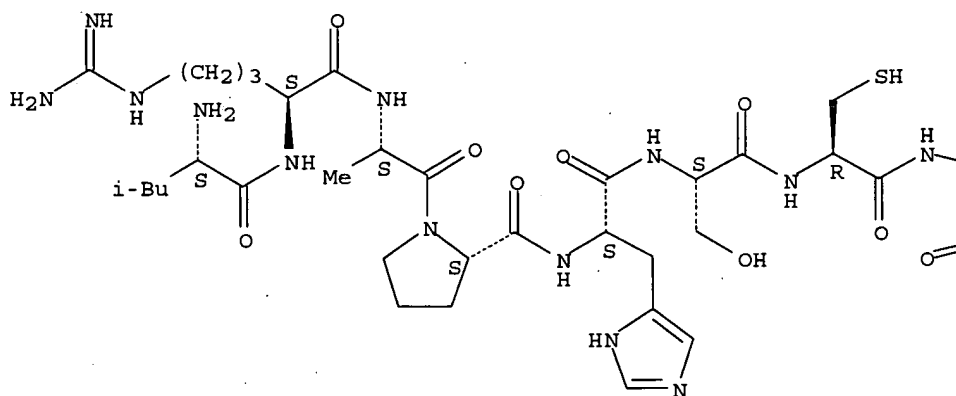


RN 103516-77-4 HCAPLUS

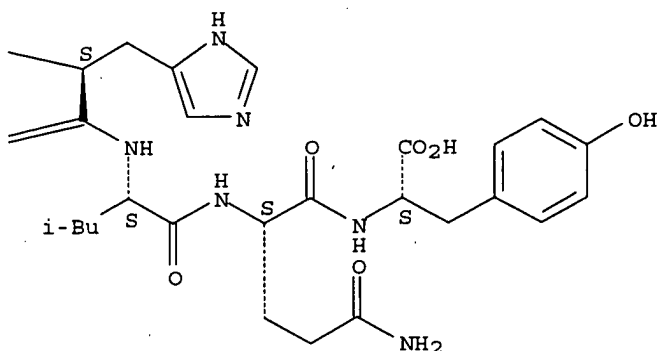
CN L-Tyrosine, N-[N2-[N-[N-[N-[N-[1-[N-(N2-L-leucyl-L-arginyl)-L-alanyl]-L-prolyl]-L-histidyl]-L-seryl]-L-cysteinyl]-L-histidyl]-L-leucyl]-L-glutamyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

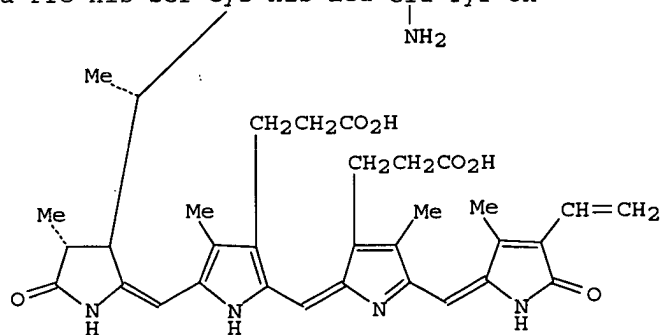


PAGE 1-B



L24 ANSWER 32 OF 32. HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:463852 HCAPLUS
 DN 93:63852
 ED Entered STN: 12 May 1984
 TI Chromopeptides from phytochrome. The structure and linkage of the PR form of the phytochrome chromophore
 AU Lagarias, J. Clark; Rapoport, Henry
 CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA
 SO Journal of the American Chemical Society (1980), 102(14), 4821-8
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 CC 6-3 (General Biochemistry)
 GI

H-Leu-Arg-Ala-Pro-His-Ser-Cys-His-Leu-Glu-Tyr-OH
 NH₂



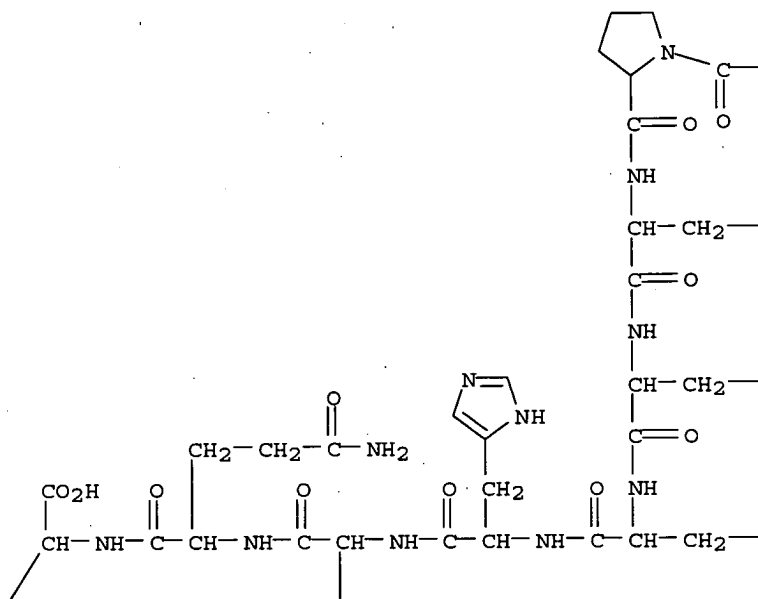
I

AB The isolation and chromatog. purification of chromophore-containing peptides from the PR form of phytochrome treated with pepsin and thermolysin are described. From the amino acid sequence and ¹H NMR spectral anal. of phytylchromobilinundecapeptide (I), the structure of the PR phytochrome chromophore and the nature of the thioether linkage joining pigment to peptide were established. Confirmatory evidence was obtained from similar anal. of phytylchromobilioctapeptide. The implications of this structural assignment with respect to the mechanism of the PR to PFR phototransformation are considered.

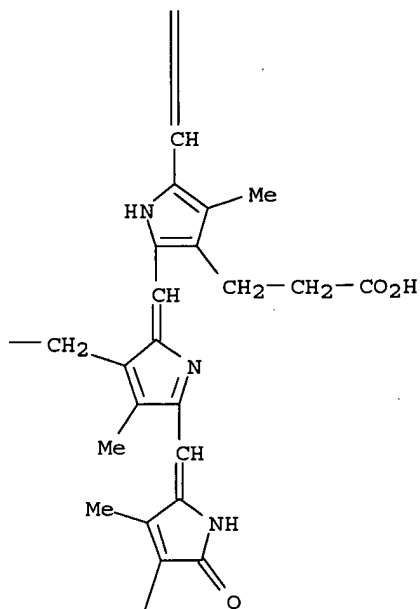
Search done by Noble Jarrell

ST phytochrome PR chromophore structure
 IT Peptides, properties
 RL: PRP (Properties)
 (amino acid sequence of, of phytochrome PR chromopeptide)
 IT Nuclear magnetic resonance
 Ultraviolet and visible spectra
 (of phytochrome PR chromopeptide)
 IT Oat
 (phytochrome PR of, chromophore structure of)
 IT Phytochromes
 (PR, chromophore of, structure and photochem. transformation of)
 IT 73508-81-3
 RL: BIOL (Biological study)
 (of phytochrome PR)
 IT 73508-81-3
 RL: BIOL (Biological study)
 (of phytochrome PR)
 RN 73508-81-3 HCAPLUS
 CN L-Tyrosine, N-[N2-[N-[N-[S-[1-[8,12-bis(2-carboxyethyl)-18-ethenyl-1,2,3,19,22,24-hexahydro-2,7,13,17-tetramethyl-1,19-dioxo-21H-bilin-3-yl]ethyl]-N-[N-[N-[1-[N-(N2-L-leucyl-L-arginyl)-L-alanyl]-L-prolyl]-L-histidyl]-L-seryl]-L-cysteinyl]-L-histidyl]-L-leucyl]-L-glutaminy]-, [2R,3R(R)]- (9CI) (CA INDEX NAME)

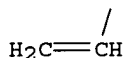
PAGE 1-A



PAGE 2-B



PAGE 3-B



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'USPAT' IS AN AMBIGUOUS FILE OR CLUSTER NAME
USPATALL      - US Patent Full Text Cluster
USPAT2        - U.S. Patents Latest Publications from 2001 - present
USPATFULL     - U.S. Patents Original Publications from 1971 - present
ENTER FILE OR CLUSTER NAME (IGNORE):end
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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE 'USPAT2' ENTERED AT 08:57:07 ON 03 AUG 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
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=> d bib abs fhistr 135 tot
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L35 ANSWER 1 OF 2  USPATFULL on STN
AN      2005:24260  USPATFULL
TI      Peptides which target tumor and endothelial cells, compositions and uses
        thereof
IN      Ternansky, Robert J., San Diego, CA, UNITED STATES
        Allan, Amy L., Encinitas, CA, UNITED STATES
        Gladstone, Patricia L., San Diego, CA, UNITED STATES
        Yoon, Won Hyung, San Diego, CA, UNITED STATES
        Parry, Graham, San Diego, CA, UNITED STATES
        Donate, Fernando, San Diego, CA, UNITED STATES
        Mazar, Andrew, San Diego, CA, UNITED STATES
PI      US 2005020810      A1      20050127
AI      US 2003-722843      A1      20031125 (10)
```

Search done by Noble Jarrell

PRAI US 2002-429174P 20021125 (60)
 US 2003-475539P 20030602 (60)
 DT Utility
 FS APPLICATION
 LREP Sunil K. Singh, Dorsey & Whitney LLP, Intellectual Property Department,
 Four Embarcadero Center, Suite 3400, San Francisco, CA, 94111-4187
 CLMN Number of Claims: 74
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 3884

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to peptide analogs of
 Ac--PHSCN--NH.sub.2 which target tumor and endothelial cells and have
 anti-tumor, anti-angiogenic and anti-metastatic activity, methods of
 making these peptides, compositions thereof and methods of using these
 peptides and pharmaceutical compositions thereof to treat, prevent and
 detect diseases characterized by tumor growth, metastasis and
 angiogenesis. The peptide analogs may serve, inter alia, as carriers of
 radioactivity, PET-active compounds, toxins, fluorescent molecules and
 PEG molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

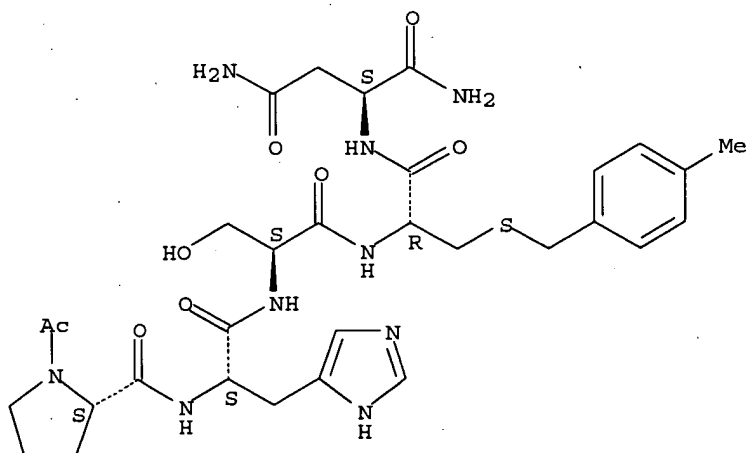
IT 701200-82-0P

(peptide inhibitors of angiogenesis, cell migration, cell invasion and
 cell proliferation, preparation, and compns. and therapeutic uses)

RN 701200-82-0 USPATFULL

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-
 methylphenyl)methyl]-L-cysteiny]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L35 ANSWER 2 OF 2 USPATFULL on STN

AN 2004:209805 USPATFULL

TI Peptides which inhibit angiogenesis, cell migration, cell invasion and
 cell proliferation, compositions and uses thereof

IN Allan, Amy L., Encinitas, CA, UNITED STATES

Donate, Fernando, San Diego, CA, UNITED STATES

Hopkins, Stephanie A., Poway, CA, UNITED STATES

Gladstone, Patricia L., San Diego, CA, UNITED STATES

Mazar, Andrew, San Diego, CA, UNITED STATES

O'Hare, Sean M., San Diego, CA, UNITED STATES

Parry, Graham, San Diego, CA, UNITED STATES

Plunkett, Marian, San Diego, CA, UNITED STATES

Ternansky, Robert J., San Diego, CA, UNITED STATES

Yoon, Won Hyung, San Diego, CA, UNITED STATES

Search done by Noble Jarrell

PI US 2004162239 A1 20040819
 AI US 2003-723144 A1 20031125 (10)
 PRAI US 2002-429174P 20021125 (60)
 US 2003-475539P 20030602 (60)
 DT Utility
 FS APPLICATION
 LREP COOLEY GODWARD, LLP, 3000 EL CAMINO REAL, 5 PALO ALTO SQUARE, PALO ALTO,
 CA, 94306
 CLMN Number of Claims: 65
 ECL Exemplary Claim: 1
 DRWN 5 Drawing Page(s)
 LN.CNT 3373

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to peptides, which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, methods of making peptides, which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, pharmaceutical compositions of these peptides and methods of using these peptides and pharmaceutical compositions of these peptides to treat diseases associated with aberrant vascularization.

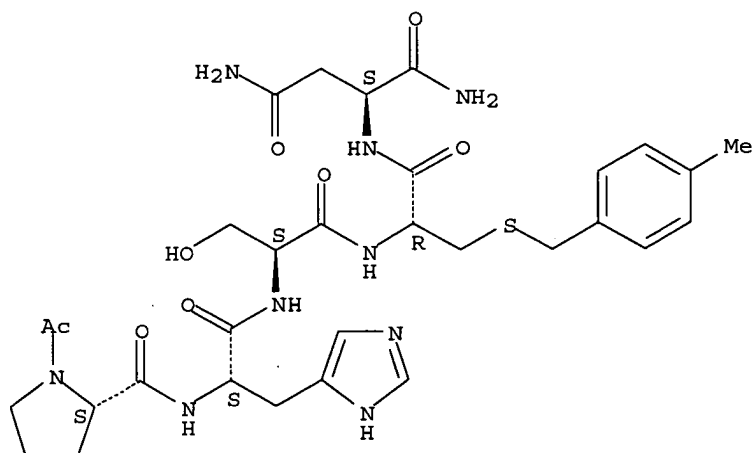
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 701200-82-0P
 (peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

RN 701200-82-0 USPATFULL

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methylphenyl)methyl]-L-cysteiny]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs fhitrn hitrn l37 tot

L37 ANSWER 1 OF 9 USPATFULL on STN

AN 2005:117696 USPATFULL

TI KDR and VEGF/KDR binding peptides and their use in diagnosis and therapy

IN Sato, Aaron K., Somerville, MA, UNITED STATES

Sexton, Daniel J., Melrose, MA, UNITED STATES

Dransfield, Daniel T., Hanson, MA, UNITED STATES

Ladner, Robert C., Ijamsville, MD, UNITED STATES

Arbogast, Christophe, Viuz - En - Sallaz, FRANCE

Bussat, Philippe, Feigers, FRANCE

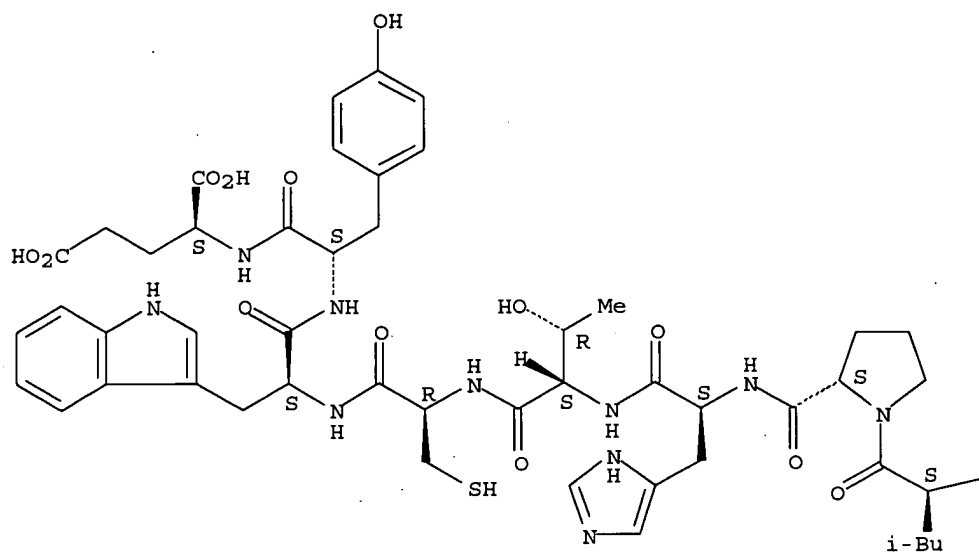
Fan, Hong, Plainsboro, NJ, UNITED STATES

Khurana, Sudha, Plainsboro, NJ, UNITED STATES

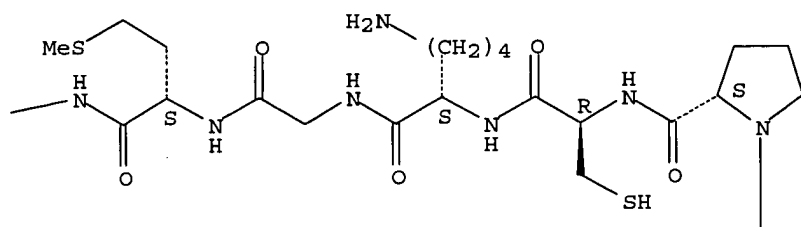
Search done by Noble Jarrell

Linder, Karen E., Kingston, NJ, UNITED STATES
 Marinelli, Edmund R., Lawrenceville, NJ, UNITED STATES
 Nanjappan, Palaniappa, Dayton, NJ, UNITED STATES
 Nunn, Adrian D., Lamberville, NJ, UNITED STATES
 Pillai, Radhakrishna, Cranbury, NJ, UNITED STATES
 Pochon, Sibylle, Troinex, SWITZERLAND
 Ramalingam, Kondareddiar, Dayton, NJ, UNITED STATES
 Shrivastava, Ajay, Plainsboro, NJ, UNITED STATES
 Song, Bo, Princeton, NJ, UNITED STATES
 Swenson, Rolf E., Princeton, NJ, UNITED STATES
 Von Wronski, Mathew A., Moorestown, NJ, UNITED STATES
 PA Dyax Corporation, Cambridge, MA, UNITED STATES (U.S. corporation)
 Bracco International B. V. (U.S. corporation)
 PI US 2005100963 A1 20050512
 AI US 2003-661156 A1 20030911 (10)
 RLI Continuation-in-part of Ser. No. US 2003-382082, filed on 3 Mar 2003,
 ABANDONED Continuation-in-part of Ser. No. WO 2003-US6731, filed on 3
 Mar 2003, PENDING
 PRAI US 2002-360851P 20020301 (60) <--
 US 2003-440411P 20030115 (60)
 DT Utility
 FS APPLICATION
 LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX
 9133, CONCORD, MA, 01742-9133, US
 CLMN Number of Claims: 199
 ECL Exemplary Claim: 1
 DRWN 118 Drawing Page(s)
 LN.CNT 14344
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention provides polypeptides, peptide dimer, and
 multimeric complexes comprising at least one binding moiety for KDR or
 VEGF/KDR complex, which have a variety of uses wherever treating,
 detecting, isolating or localizing angiogenesis is advantageous.
 Particularly disclosed are synthetic, isolated polypeptides capable of
 binding KDR or VEGF/KDR complex with high affinity (e.g., having a
 K_{sub}D<1 μM), and dimer and multimeric constructs comprising these
 polypeptides.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 599210-01-2
 (amino acid sequence; sequences of KDR and VEGF/KDR binding peptides,
 peptide dimers, and multimeric complexes and their use in diagnosis and
 therapy)
 RN 599210-01-2 USPATFULL
 CN L-Glutamic acid, glycyl-L-histidyl-L-prolyl-L-cysteinyl-L-lysylglycyl-L-
 methionyl-L-leucyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinyl-L-
 tryptophyl-L-tyrosyl- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.

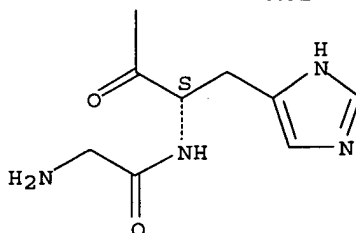
PAGE 1-A



PAGE 1-B



PAGE 2-B



IT 599210-01-2 851724-81-7

(amino acid sequence; sequences of KDR and VEGF/KDR binding peptides, peptide dimers, and multimeric complexes and their use in diagnosis and therapy)

L37 ANSWER 2 OF 9 USPATFULL on STN

AN 2005:68857 USPATFULL

TI Binding phenol oxidizing enzyme-peptide complexes

IN Wolfgang, Aehle, Delfgauw, NETHERLANDS

Baldwin, Toby M., Palo Alto, CA, UNITED STATES

Van Gastel, Franciscus J.C., Union City, CA, UNITED STATES

Janssen, Giselle G., San Carlos, CA, UNITED STATES

Murray, Christopher J., Soquel, CA, UNITED STATES

Wang, Huaming, Fremont, CA, UNITED STATES

Winetzky, Deborah S., Foster City, CA, UNITED STATES

PI US 2005058996 A1 20050317

AI US 2002-235043 A1 20020903 (10)

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DT Utility

FS APPLICATION

LREP H. THOMAS ANDERTON, JR., Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94034-1013

CLMN Number of Claims: 30

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 3422

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present application relates to peptides which bind to a target stain, phenol oxidizing enzyme-binding peptide complexes wherein the binding peptide is attached to the C-terminus of the phenol oxidizing enzyme or is inserted or substituted into the phenol oxidizing enzyme. In a preferred embodiment the phenol oxidizing enzyme is a laccase specifically Stachybotrys oxidase B and variants thereof. The invention provides expression vectors comprising the phenol oxidizing enzyme-binding peptide complex as well as host cells comprising the vectors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

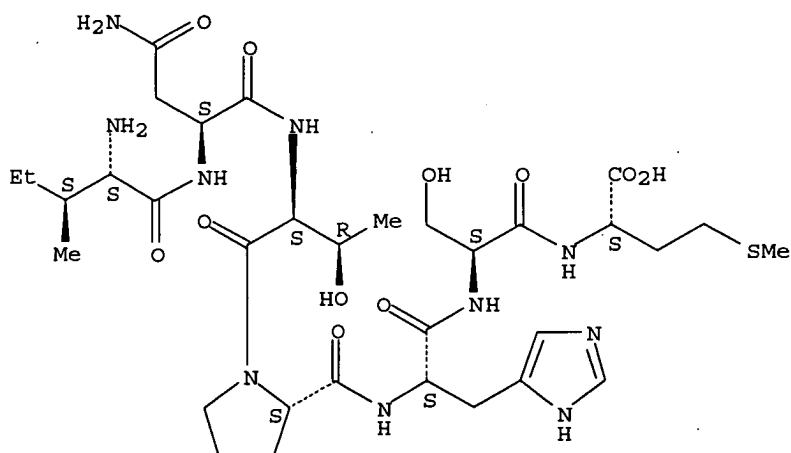
IT 502166-83-8DP, cysteine derivs. and fusion product with phenol oxidizing enzyme

(amino acid sequence; peptides able to bind carotenoid compds., their sequences and use in construction of fusion proteins with Stachybotrys phenol oxidizing enzymes for creation of detergent)

RN 502166-83-8 USPATFULL

CN L-Methionine, L-isoleucyl-L-asparaginyl-L-threonyl-L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L37 ANSWER 3 OF 9 USPATFULL on STN

AN 2005:23322 USPATFULL

TI 52 Human secreted proteins

IN Ni, Jian, Germantown, MD, UNITED STATES

Baker, Kevin P., Darnestown, MD, UNITED STATES

Birse, Charles E., North Potomac, MD, UNITED STATES

Fiscella, Michele, Bethesda, MD, UNITED STATES

Komatsoulis, George A., Silver Spring, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Duan, D. Roxanne, Gaithersburg, MD, UNITED STATES

Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

La Fleur, David W., Washington, DC, UNITED STATES

Moore, Paul A., North Bethesda, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Wei, Ping, Agoura Hills, CA, UNITED STATES

Florence, Kimberly A., Rockville, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI	US 2005019866	A1	20050127
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AI US 2004-883936 A1 20040706 (10)

Continuation of Ser. No. US 2001-789561, filed on 22 Feb 2001, PENDING
Continuation-in-part of Ser. No. WO 2000-US24008, filed on 31 Aug 2000,
PENDING

PRAI US 1999-152317P 19990903 (60)

US 1999-152315P 19990903 (60)

DT Utility

DI	STATUS
FS	APPLICATION

LREP HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY DEPT., 14200 SHADY GROVE ROAD, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 24739

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 328529-77-7

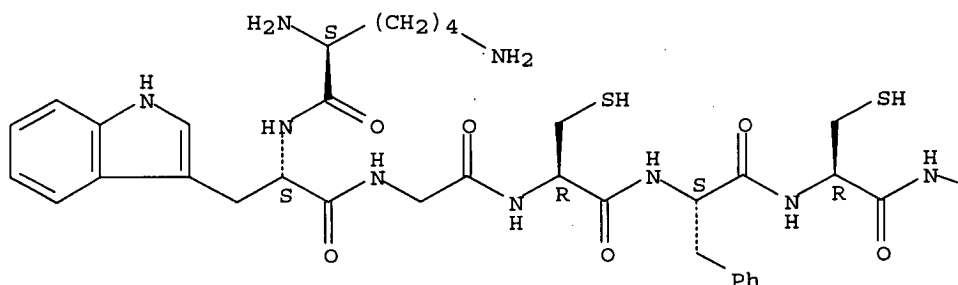
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

RN 328529-77-7 USPTAFULL

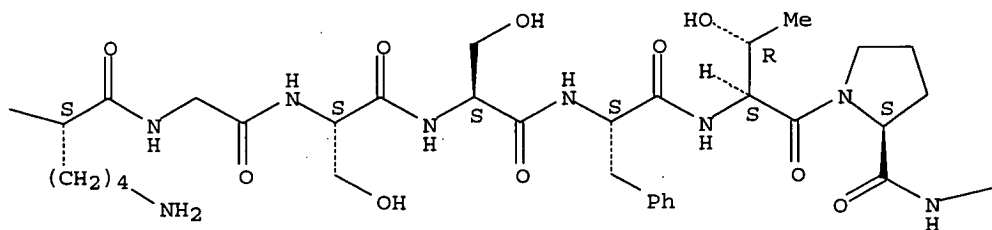
CN Glycine, L-lysyl-L-tryptophylglycyl-L-cysteinyl-L-phenylalanyl-L-cysteinyl-L-lysylglycyl-L-seryl-L-seryl-L-phenylalanyl-L-threonyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-prolyl-L-prolyl-L- α -glutamyl-L-alanyl-L-prolyl-L-leucyl-L-phenylalanyl-L-prolyl-L-alanyl-L-valyl-L-leucyl-L-leucyl-L-valyl-L-seryl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

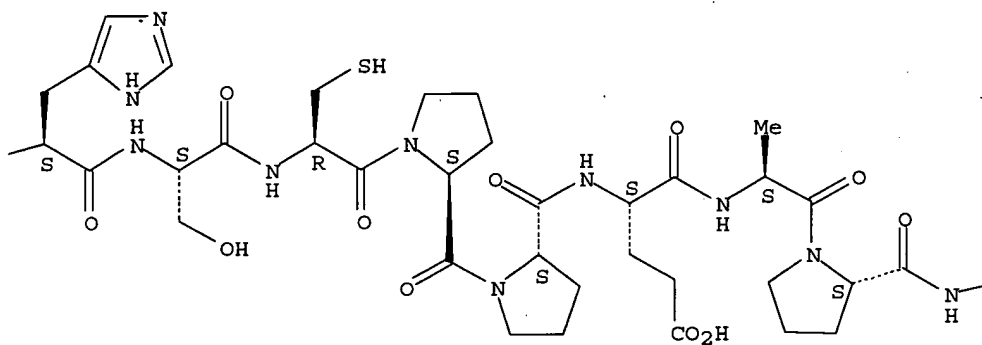


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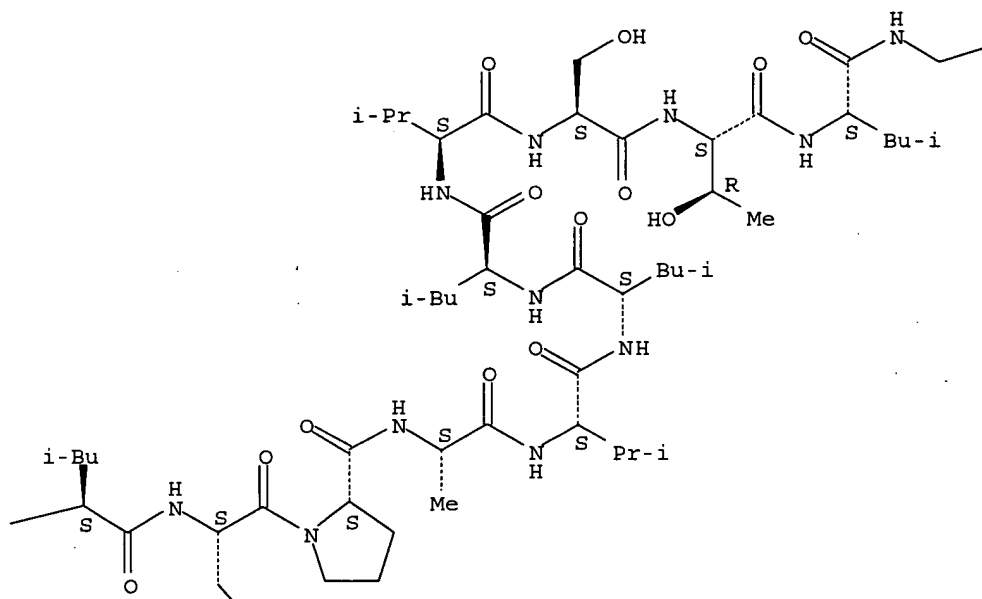


Search done by Noble Jarrell

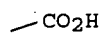
PAGE 1-C



PAGE 1-D



PAGE 1-E



PAGE 2-D

Ph

IT 328529-77-7
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences
of 52 human secreted proteins)

L37 ANSWER 4 OF 9 USPATFULL on STN

AN 2004:2568 USPATFULL

TI 50 human secreted proteins

IN Moore, Paul A., Germantown, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

LaFleur, David W., Washington, DC, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Brewer, Laurie A., St. Paul, MN, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2004002591 A1 20040101

AI US 2002-47021 A1 20020117 (10) <--

RLI Continuation-in-part of Ser. No. US 2000-722329, filed on 28 Nov 2000,
PENDING Continuation of Ser. No. US 1999-262109, filed on 4 Mar 1999,
ABANDONED Continuation-in-part of Ser. No. WO 1998-US18360, filed on 3
Sep 1998, PENDING

PRAI US 2001-262066P 20010118 (60) <--

US 1997-57626P 19970905 (60) <--

US 1997-57663P 19970905 (60) <--

US 1997-57669P 19970905 (60) <--

US 1997-58666P 19970912 (60) <--

US 1997-58667P 19970912 (60) <--

US 1997-58973P 19970912 (60) <--

US 1997-58974P 19970912 (60) <--

US 1998-90112P 19980622 (60) <--

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 2 Drawing Page(s)

LN.CNT 33379

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and
isolated nucleic acids containing the coding regions of the genes
encoding such proteins. Also provided are vectors, host cells,
antibodies, and recombinant methods for producing human secreted
proteins. The invention further relates to diagnostic and therapeutic
methods useful for diagnosing and treating diseases, disorders, and/or
conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 443339-97-7

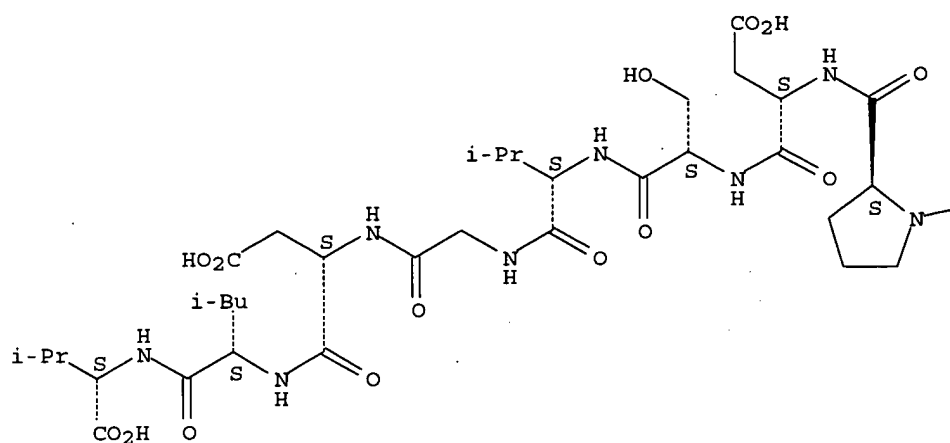
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences
of 50 human secreted proteins)

RN 443339-97-7 USPATFULL

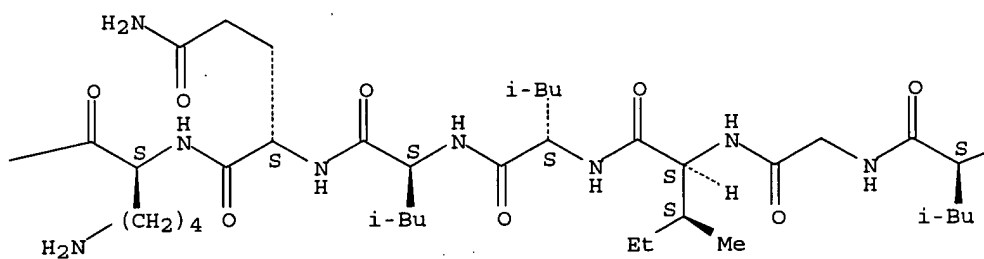
CN L-Valine, L-alanyl-L-leucyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-
leucyl-L- α -glutamyl-L-arginyl-L-alanyl-L-lysyl-L- α -glutamyl-
L-isoleucyl-L-lysyl-L-isoleucyl-L-lysyl-L-leucylglycyl-L-isoleucyl-L-
leucyl-L-leucyl-L-glutaminyl-L-lysyl-L-prolyl-L- α -aspartyl-L-seryl-
L-valylglycyl-L- α -aspartyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

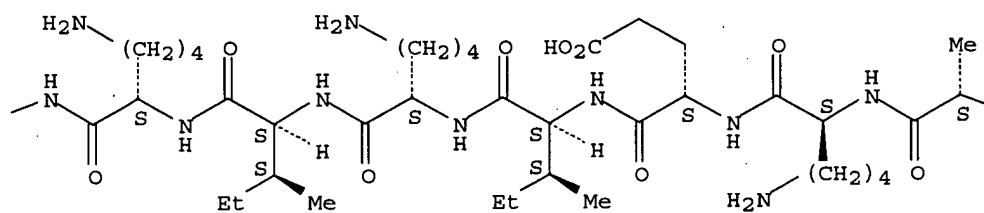
PAGE 1-A



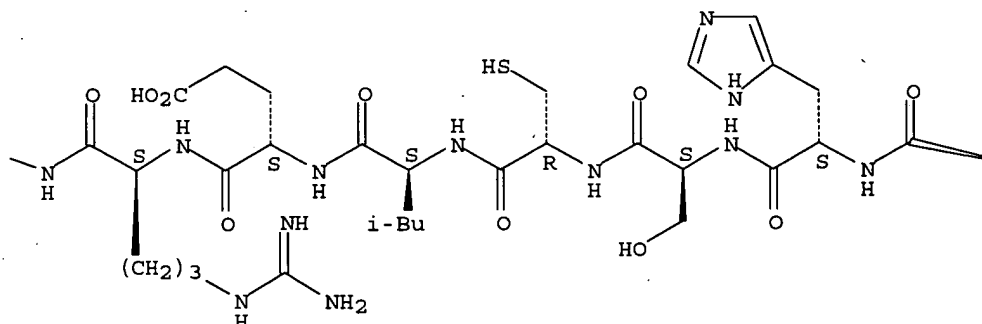
PAGE 1-B



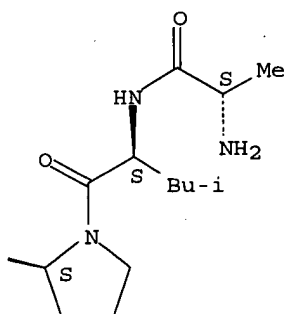
PAGE 1-C



PAGE 1-D



PAGE 1-E



IT 443339-97-7
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences
of 50 human secreted proteins)

L37 ANSWER 5 OF 9 USPATFULL on STN

AN 2003:173232 USPATFULL

TI B7-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES

Chen, Lieping, Rochester, MN, UNITED STATES

Baker, Kevin P., Darnestown, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
corporation)

PI US 2003119076 A1 20030626

AI US 2002-141953 A1 20020510 (10)

RLI Continuation of Ser. No. US 2001-790622, filed on 23 Feb 2001, PENDING
Continuation-in-part of Ser. No. WO 2000-US23792, filed on 30 Aug 2000,
PENDING

PRAI US 1999-152317P 19990903 (60)

US 2000-200346P 20000428 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 12418

Search done by Noble Jarrell

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human B7-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human B7-like polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human B7-like polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 328529-77-7

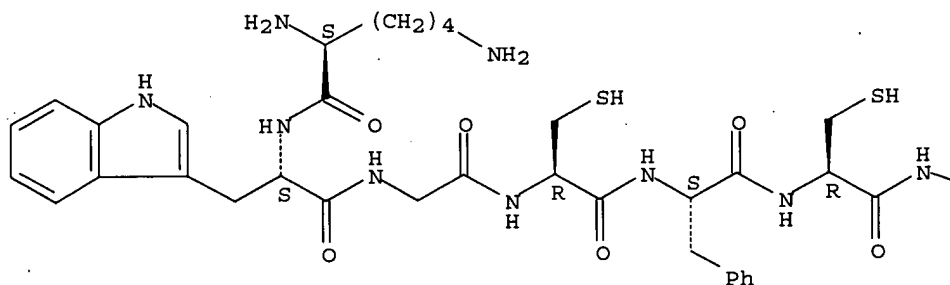
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

RN 328529-77-7 USPATFULL

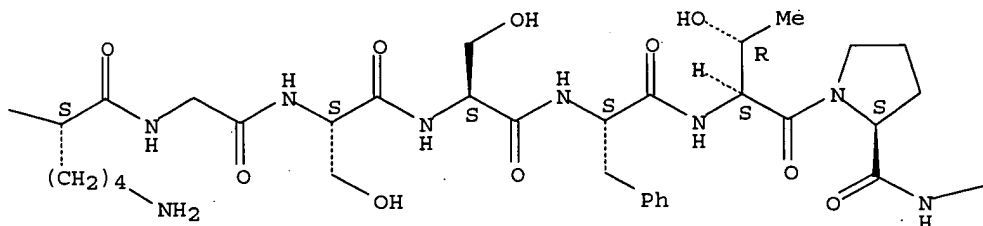
CN Glycine, L-lysyl-L-tryptophylglycyl-L-cysteiny-L-phenylalanyl-L-cysteiny-L-lysylglycyl-L-seryl-L-seryl-L-phenylalanyl-L-threonyl-L-prolyl-L-histidyl-L-seryl-L-cysteiny-L-prolyl-L-prolyl-L- α -glutamyl-L-alanyl-L-prolyl-L-leucyl-L-phenylalanyl-L-prolyl-L-alanyl-L-valyl-L-leucyl-L-leucyl-L-valyl-L-seryl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

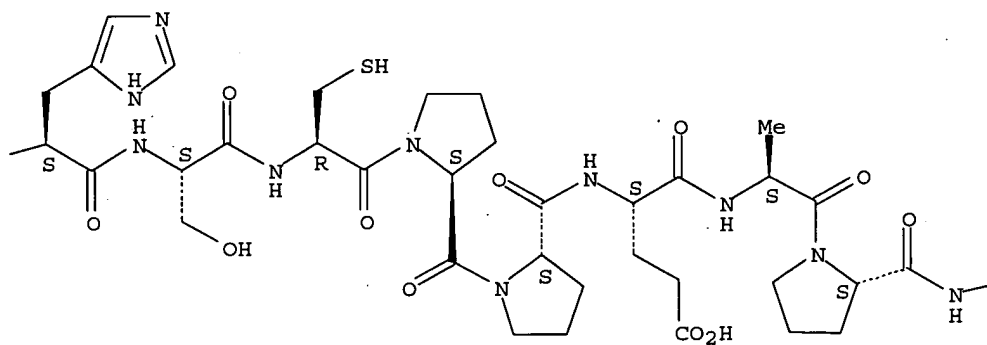
PAGE 1-A



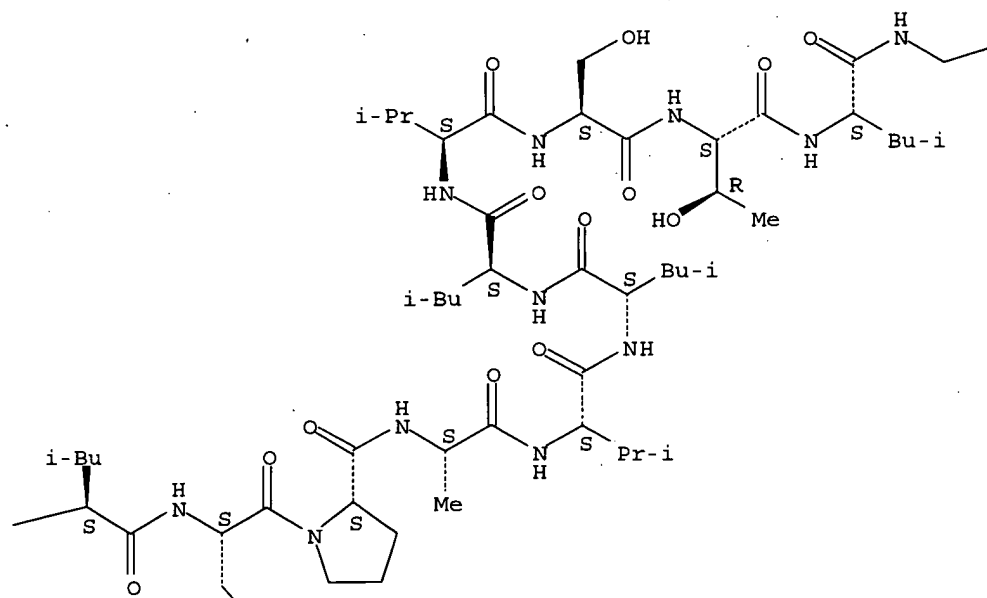
PAGE 1-B



PAGE 1-C



PAGE 1-D



PAGE 1-E

CO₂H

PAGE 2-D

Ph

IT 328529-77-7
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

L37 ANSWER 6 OF 9 USPATFULL on STN

AN 2003:146720 USPATFULL

TI Binding phenol oxidizing enzyme-peptide complexes

IN Aehle, Wolfgang, Delfgauw, NETHERLANDS

Baldwin, Toby M., Palo Alto, CA, UNITED STATES

van Gastel, Franciscus J. C., Union City, CA, UNITED STATES

Janssen, Giselle G., San Carlos, CA, UNITED STATES

Murray, Christopher J., Soquel, CA, UNITED STATES

Wang, Huaming, Fremont, CA, UNITED STATES

Winetzky, Deborah S., Foster City, CA, UNITED STATES

PI US 2003100467 A1 20030529

AI US 2001-954385 A1 20010912 (9) <--

DT Utility

FS APPLICATION

LREP GENENCOR INTERNATIONAL, INC., 925 PAGE MILL ROAD, PALO ALTO, CA, 94304

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 1461

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present application relates to peptides which bind to a target stain, phenol oxidizing enzyme-binding peptide complexes wherein the binding peptide is attached to the C-terminus of the phenol oxidizing enzyme or is inserted or substituted into the phenol oxidizing enzyme. In a preferred embodiment the phenol oxidizing enzyme is a laccase specifically *Stachybotrys* oxidase B and variants thereof. The invention provides expression vectors comprising the phenol oxidizing enzyme-binding peptide complex as well as host cells comprising the vectors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

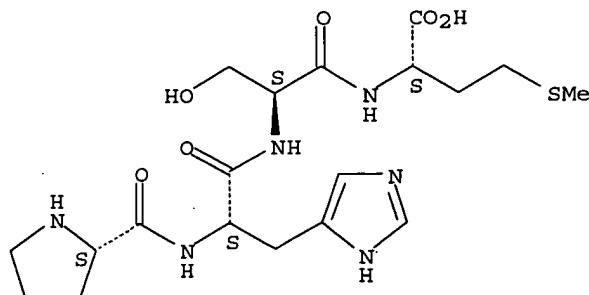
IT 502169-28-0

(protein motif; selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

RN 502169-28-0 USPATFULL

CN L-Methionine, L-prolyl-L-histidyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 502169-28-0

(protein motif; selection and production of laccase- and other phenol

Search done by Noble Jarrell

oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)
 IT 502166-83-8P 502167-78-4P 502167-93-3P
 (selection and production of laccase- and other phenol oxidizing enzyme-binding peptide complexes for detergents and carotenoid stain removal)

L37 ANSWER 7 OF 9 USPATFULL on STN
 AN 2002:307551 USPATFULL
 TI Mannosidase structures
 IN Rose, David Richard, Markham, CANADA
 Kuntz, Douglas Arthur, Toronto, CANADA
 Van Den Elsen, Jean Maria Hubertus, Bath, UNITED KINGDOM
 PI US 2002172670 A1 20021121 <--
 AI US 2001-960226 A1 20010921 (9) <--
 PRAI US 2001-263458P 20010123 (60) <--
 US 2000-234879P 20000922 (60) <--
 DT Utility
 FS APPLICATION
 LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
 CLMN Number of Claims: 47
 ECL Exemplary Claim: 1
 DRWN 20 Drawing Page(s)
 LN.CNT 40572

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

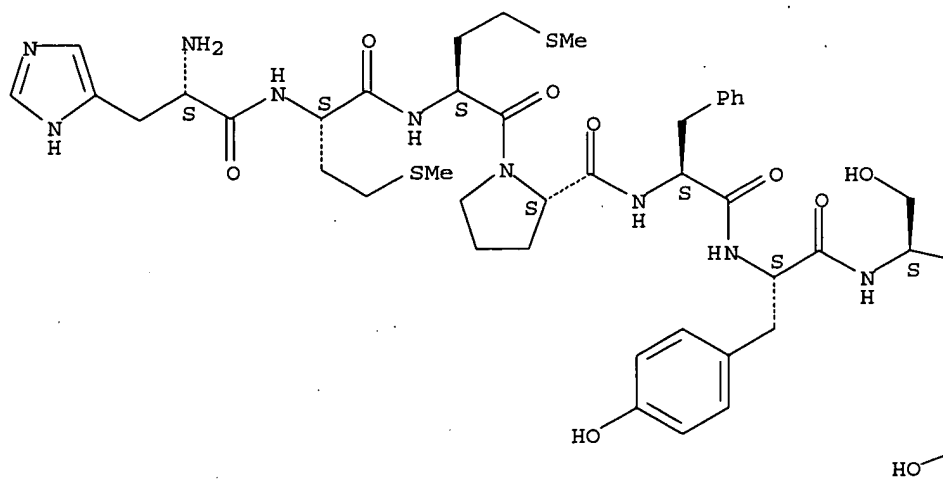
AB The present invention relates to a crystal comprising a mannosidase II ligand-binding domain. In particular the present invention relates to a crystal comprising mannosidase II (with and without swainsonine), and its use to generate models for elucidating the structure of other polypeptides and for better identifying ligands capable of modulating mannosidase II activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

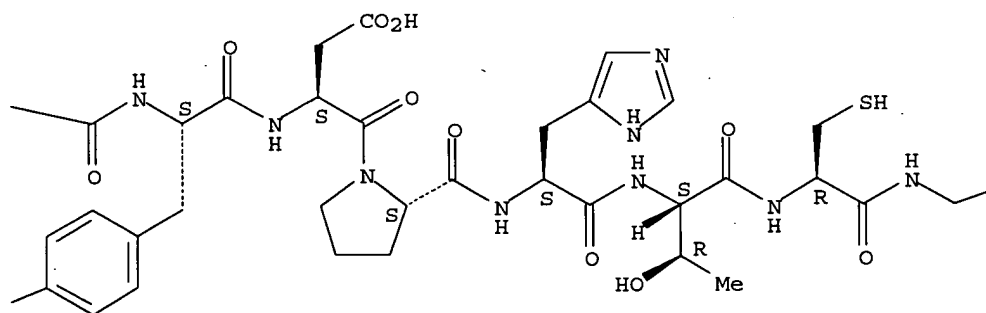
IT 476173-05-4
 (protein motif; crystal structure of Drosophila α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)
 RN 476173-05-4 USPATFULL
 CN L-Arginine, L-histidyl-L-methionyl-L-methionyl-L-prolyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-tyrosyl-L- α -aspartyl-L-prolyl-L-histidyl-L-threonyl-L-cysteinylglycyl-L-prolyl-L- α -aspartyl-L-prolyl-L-lysyl-L-valyl-L-isoleucyl-L-cysteinyl-L-glutaminy-L-phenylalanyl-L- α -aspartyl-L-phenylalanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

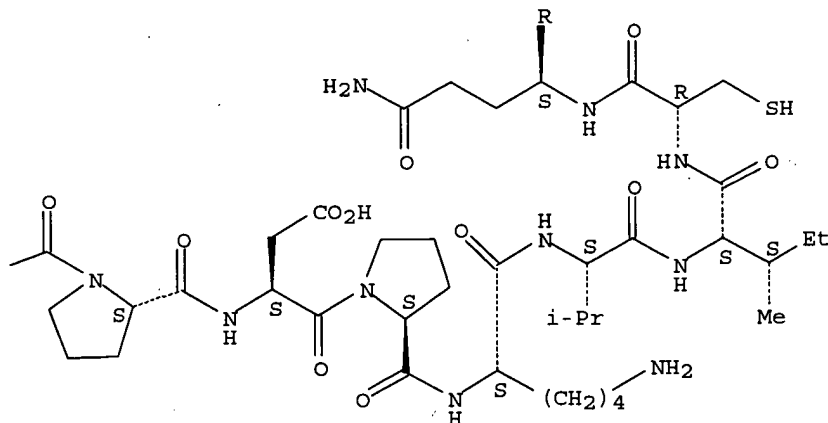
PAGE 1-A



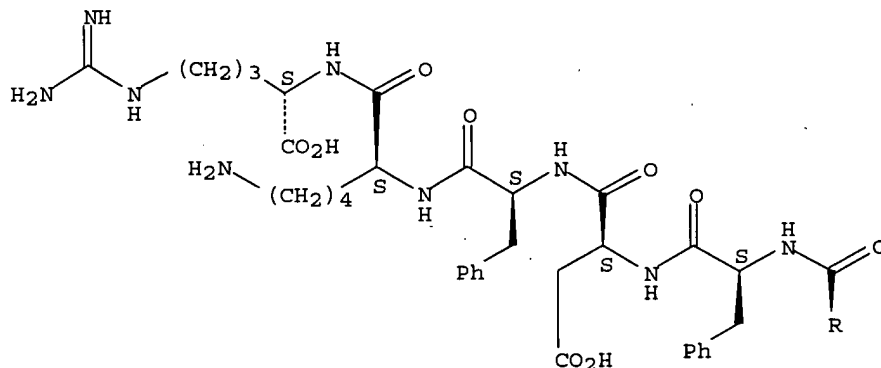
PAGE 1-B



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IT 476173-05-4
 (protein motif; crystal structure of *Drosophila* α -mannosidase II and swainsonine complexes, its use for identifying mannosidase II activity-modulating ligands and therapeutic applications)

L37 ANSWER 8 OF 9 USPATFULL on STN
 AN 2002:126306 USPATFULL
 TI 52 human secreted proteins
 IN Ni, Jian, Germantown, MD, UNITED STATES
 Baker, Kevin P., Darnestown, MD, UNITED STATES
 Birse, Charles E., North Potomac, MD, UNITED STATES
 Fiscella, Michele, Bethesda, MD, UNITED STATES
 Komatsoulis, George A., Silver Spring, MD, UNITED STATES
 Rosen, Craig A., Laytonsville, MD, UNITED STATES
 Soppet, Daniel R., Centreville, VA, UNITED STATES
 Young, Paul E., Gaithersburg, MD, UNITED STATES
 Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
 Duan, D. Roxanne, Bethesda, MD, UNITED STATES
 Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
 LaFleur, David W., Washington, DC, UNITED STATES
 Moore, Paul A., Germantown, MD, UNITED STATES

Search done by Noble Jarrell

Shi, Yanggu, Gaithersburg, MD, UNITED STATES
 Wei, Ping, Brookeville, MD, UNITED STATES
 Florence, Kimberly A., Rockville, MD, UNITED STATES

PI US 2002064818 A1 20020530 <--
 AI US 2001-789561 A1 20010222 (9) <--
 RLI Continuation-in-part of Ser. No. WO 2000-US24008, filed on 31 Aug 2000,
 UNKNOWN
 PRAI US 1999-152317P 19990903 (60) <--
 US 1999-152315P 19990903 (60) <--
 DT Utility
 FS APPLICATION
 LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
 CLMN Number of Claims: 23
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 24623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 328529-77-7

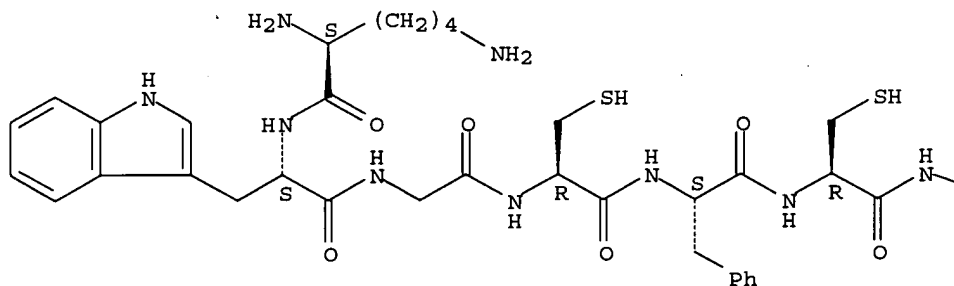
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

RN 328529-77-7 USPATFULL

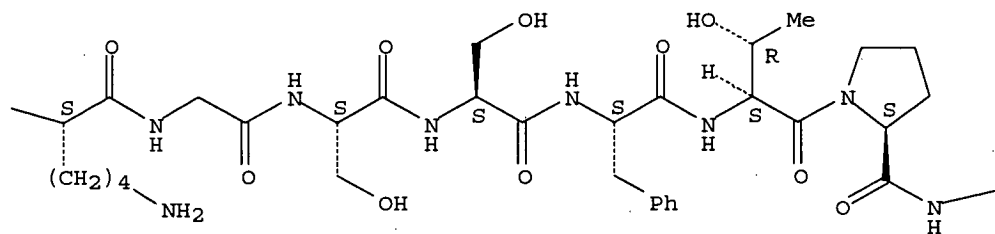
CN Glycine, L-lysyl-L-tryptophylglycyl-L-cysteinyl-L-phenylalanyl-L-cysteinyl-L-lysylglycyl-L-seryl-L-seryl-L-phenylalanyl-L-threonyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-L-prolyl-L-prolyl-L- α -glutamyl-L-alanyl-L-prolyl-L-leucyl-L-phenylalanyl-L-prolyl-L-alanyl-L-valyl-L-leucyl-L-leucyl-L-valyl-L-seryl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

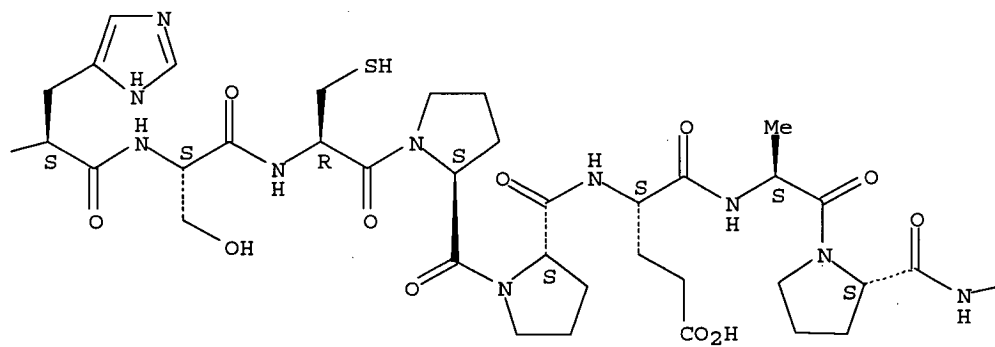
PAGE 1-A



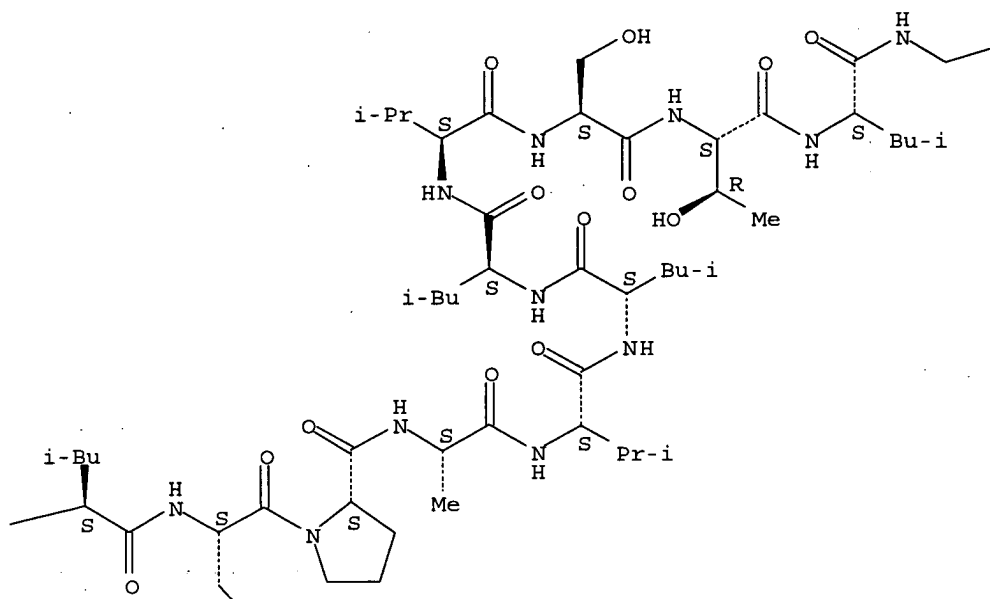
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CO₂H

PAGE 2-D

Ph

IT 328529-77-7

(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 52 human secreted proteins)

L37 ANSWER 9 OF 9 USPATFULL on STN

AN 1999:163820 USPATFULL

TI Anticancer compounds and methods

IN Livant, Donna L., Ann Arbor, MI, United States

PA The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

PI US 6001965 19991214 <--

AI US 1997-915189 19970820 (8) <--

RLI Continuation-in-part of Ser. No. US 1996-754322, filed on 21 Nov 1996, now patented, Pat. No. US 5840514, issued on 24 Nov 1998

DT Utility

FS Granted

EXNAM Primary Examiner: Woodward, Michael P.; Assistant Examiner: Borin, Michael

LREP Medlen & Carroll, LLP

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 2294

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Search done by Noble Jarrell

AB The testing of tumor cells, including human tumors capable of metastases, in assays employing fibronectin-depleted substrates is described. Ex vivo induction of cells, including biopsied human cells, is performed with invasion-inducing agents. Additionally, anti-cancer chemotherapeutics are described. Specifically, chemotherapeutic agents which have anti-metastatic and anti-growth properties are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

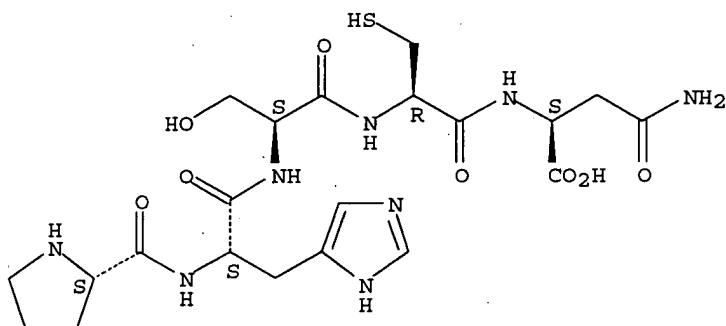
IT 252229-85-9

(antitumor peptides and inhibition of metastasis)

RN 252229-85-9 USPATFULL

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 252229-85-9 252230-05-0

(antitumor peptides and inhibition of metastasis)

=> b home

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